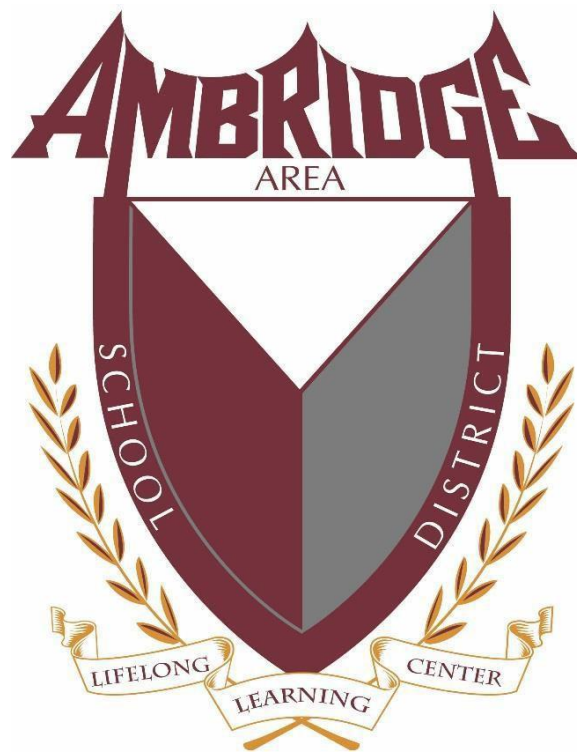


Ambridge Area High School



Course of Studies Book 2023 - 2024

AMBRIDGE AREA HIGH SCHOOL

BOARD OF EDUCATION

Mrs. Kelly Romasco – *President*
Ms. Amy Fitsko – *Vice President*
Mr. Matt Zatchey – *Treasurer*
Mr. John Carpenter
Mr. Thomas Cephas
Mrs. Cathy Fischer
Mr. Robert Keber
Mrs. Kelly Smith
Mrs. Mary Jo Kehoe
Ms. Megan Turnbull – *Solicitor*
Mrs. June Mueller – *Board Secretary*

CENTRAL OFFICE ADMINISTRATION

(724) 266-2833

Dr. Joseph Pasquerilla – *Superintendent of Schools*
Mr. Barry King – *Assistant to the Superintendent*
Ms. Bethann Eyth – *Business Manager and Director of Operations and Transportation*
Dr. Amy Filipowski – *Director of Special Education*
Mrs. Leigh Ann Holman – *Food Service Director*
Mr. Foster Crawford – *Technology Supervisor*

HIGH SCHOOL PERSONNEL

(724)266-2833 / FAX: (724) 266-5056

Dr. Janice Zupsic – *Principal*
Mr. Joseph Lameza – *Assistant Principal*
Mr. Joseph Lamenza – *Athletic Director*

GUIDANCE DEPARTMENT

(724) 266-2833 ext. 2377

Ms. Chelsea Benedict – 9th & 10th *Grade Counselor*
Ms. Kathryn Couch - 11th & 12th *Grade Counselor*
Ms. Sarah Schaffer – *School Social Worker*

TABLE OF CONTENTS

Table of Contents	3
General Information	4
PSAT & SAT.....	13
Planning for College	16
Beaver County Career & Technology Center	18
Art.....	38
CCBC Aviation Academy.....	21
CCBC Health Academy	22
CCBC Criminal Justice Academy	24
CCBC STEM Academy	26
CCAC Apprenticeship Program	37
Business.....	40
English.....	43
Foreign Language.....	48
Health & Physical Education	50
J.R.O.T.C.....	53
Family and Consumer Science.....	55
Math.....	57
Music	64
Reading.....	68
Science.....	69
Social Studies	76
Special Education	80
Technology Education / Applied Engineering.....	81
Course Codes by Department.....	86

GENERAL INFORMATION

This booklet is designed to familiarize the students and parents of the Ambridge Area High School with our educational programs, courses, requirements/standards and scheduling procedures. The contents provide valuable information to help the students and parents plan a program of study and make the appropriate selections.

If you have any questions concerning anything contained in this booklet, please do not hesitate to contact the High School Main Office or Guidance Office at (724) 266-2833 ext. 2377.

The Pennsylvania Department of Education requires that all students enrolled in schools within the state meet minimum scholastic standards before being granted a high school diploma. Additionally, the Ambridge Area Board of Education has established requirements that exceed those standards.

Please refer below to determine the required number of credits needed for graduation.

<u>Subject</u>	<u>Class of 2022-23</u>	<u>Class of 2023-24</u>	<u>Class of 2024-25</u>	<u>Class of 2025-26</u>
English	4	4	4	4
Social Studies	4	4	4	4
Mathematics	3 or 4*	3 or 4*	3 or 4*	3 or 4*
Science	3 or 4*	3 or 4*	3 or 4*	3 or 4*
H & P E	2	2	2	2
Electives	6.5	6.5	6.5	6.5
Cumulative Career Project	Cumulative Career Project 1.0	Cumulative Career Project 1.0	Cumulative Career Project 1.0	Cumulative Career Project 1.0
<u>Total Credits</u>	24.5	24.5	24.5	24.5

****Students must achieve seven total credits in math and science combined to meet graduation standards. A minimum of three credits must be achieved in each area.***

*****Students must achieve at a "Proficient" or "Advanced" level on the Keystone Exam, as required by The Pennsylvania Department of Education, to receive a diploma from Ambridge Area High School. Any student NOT reaching "Proficient" or "Advanced" on either the Keystone Exam or the Keystone retest will be required to show success in an alternate pathway approved by the school district and in Accordance to State Law Act 158.***

Under Act 158 of 2018 (ACT 158, PDE), statewide graduation requirements will take effect starting with the graduating class of 2023. Act 158 provides five options for meeting graduation requirements via PDE and Keystone Testing: **(1) Keystone Proficiency Pathway, (2) Keystone Composite Pathway, (3) Alternate Assessment Pathway, (4) Evidence-Based Pathway, and (5) Career and Technical Education Pathway.** Students will be required under the first two pathways to demonstrate proficiency or an overall proficient composite score on the Keystone End-of-Unit Exams before graduation as per The Pennsylvania Department of Education (PDE) and ACT 158 of 2018 (Act 158, PDE). Graduates of the class of 2023 and beyond who do not meet proficiency or advance standings on the End-of-Unit Keystone exams or do not meet the total Composite Score will be required to provide evidence as per one of the additional alternative pathways before graduation listed below:

The new state guidelines and graduation requirements from The Pennsylvania Department of Education Act 158 are presented below. Specifically, according to ACT 158, the below pathways of graduation are required for any student in the graduating class of 2023 and beyond, starting with achieving proficiency through students assessment scores:

- 1. Keystone Proficiency Pathway:** Scoring proficient or advanced on each Keystone Exam - Algebra I, Literature, and Biology.
- 2. Keystone Composite Pathway:** Earning a composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams (while achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two).

According to ACT 158, graduates of the class of 2023 and beyond who do not meet proficiency or advance standings on the End-of-Unit Keystone exams or do not meet the total Composite Score will be required to provide evidence as per one of the additional alternative pathways to graduation listed below:

3. **Alternate Assessment Pathway:** 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 an established score on an approved alternate assessment and additional evidence as defined by The Pennsylvania Department of Education.
4. **Evidence-Based Pathway:** 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, and additional evidence as defined by The Pennsylvania Department of Education.
5. **Career-Technology Pathway:** 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 related to the CTE Concentrator's program of study and additional evidence as defined by The Pennsylvania Department of Education.

To comply with the state, federal and PDE guidelines, any student in 9th, 10th, or 11th that earned a passing grade in the End-of-Unit 2019-2020 Pennsylvania System of School Assessment course will be deemed proficient on the Keystone Exam for graduation purposes only and are not required to sit for the End-of-Unit Exam. As per PDE, and as amended by the every student succeeds act:

Any student who completed a course in an academic content area associated with a keystone exam in the 2019-2020 school year only shall not be required to take the keystone exam related to that course and shall be deemed proficient for purposes (relating to high school graduation requirements), provided that the student demonstrates successful completion of locally established, grade-based requirements for the academic content areas associated with each keystone exam.

At this time, any student that was successful in the End-Of-Course Keystone Biology, Literature 10, and Algebra I class for the 2019-2020 school year, and/or students who were exempted from a Keystone Exam due to successful completion of an End-of-Unit 2019-2020 Keystone content area class may still benefit from the option to retest to achieve a numerical score for use in the Composite Pathway for graduation purposes if still requiring Keystone tests in other content areas.

The first two pathways are based solely on Keystone Exam scores. For that reason, all students will have access to take the exam and are strongly encouraged to sit during the scheduled test date. Any student scheduled in an End-of-Unit testing session will receive a letter indicating their specific testing date after they complete the identified Keystone trigger courses at the district level.

Due to statewide measures, we strongly encourage your student to participate in the End-of-Year Course scheduled exam to positively impact the School-Wide data and achieve measures of proficiency for graduation.

As a reminder, starting with the graduating class of 2023 and beyond, students are required to pass the trigger keystone course as per ACT 158 law as per PDE. This includes the following courses at the High School Level in Science, English, and Math: Honors Biology or Biology; English 10, Practical English 10, College Prep English 10, Advanced English 10, and Algebra I. Students who are not successful in completing a trigger course will be required to complete academic remediation of the course required for graduation. The School Counselor will discuss completion of the trigger courses with the student and academic mediation to meet ACT 158 guidelines.

We strongly encourage parents/guardians and students to review the videos posted on ACT 158 and the additional PDE requirements below to learn more about graduation's specific pathways and information.

Thus, additional information in regards to the graduation requirements for 2023 and beyond related to ACT 158, informational videos, Power-Points, and/or handouts can be found at: <https://www.pdesas.org/Page/Viewer/ViewPage/56/> or: <https://pdesas.org/Frameworks/DCEToolkit/Act158PathwaysToGraduationToolkit>.

The Ambridge Area School District will meet with students to discuss the above guidelines and pathways for graduation. Information will also be posted under the guidance webpage: www.ambridge.k12.pa.us – Services – Guidance and Counseling – Keystone Assessments. Students will be working with the academic team and students to ensure each student has a pathway for graduation completion.

PROMOTIONAL STANDARDS -- Students must earn a "D" grade or a percentage of 60 as a final grade to receive credit for a particular course. It is expected that a student can achieve a minimum of six credits per year towards the 24.5 needed for graduation.

Students who fail a required course during their freshman, sophomore, or junior years must successfully make up the course in a recognized and/or approved remedial or summer school program. These courses will be taught by Ambridge Area School District teachers at a fee to be determined. Courses can be completed through the Credit Recovery Cyber Program at Ambridge Area High School. Information can be found in the High School Guidance Office.

(For Seniors Only)

Participation in graduation is dependent upon fulfilling the outlined graduation requirements of 24.5 credits. Should a senior fall short of the 24.5 credits required, they ***will not*** be eligible to walk in the graduation ceremony of their class.

GRADING SYSTEM -- The grading scale used at Ambridge Area High School will be based on a four point system (i.e. A=4; B=3; C=2, D=1; E=0)

<u>Letter Grade</u>	<u>Percentage</u>	<u>Quality Points</u>
A	90% - to - 100%	4.0
B	80% - to - 89%	3.0
C	70% - to - 79%	2.0
D	60% - to - 69%	1.0
E	0 - to - 59 %	0.0

Grades in most classes will be calculated by percentage and be reflected as such on the report card.

WEIGHTED COURSES -- A student must earn an "A," "B," or "C" grade to receive the additional weighted value. A student who receives a "D" will obtain the credit value for the course but not the weighted value. The following is an outline of courses that have additional weight.

Weighted GPA will be calculated in two steps. The first step is to calculate a "Non-Weighted GPA" on a 4.0 scale. Once this GPA is calculated, an add-on factor for "Advanced Placement" and "Honors" combined with the Non-Weighted GPA in the following manner. All course weight is assigned by course, not by grade level.

<i>AP / Dual Enrollment</i>	<i>Add On Factor</i>	<i>Honors</i>	<i>Add On Factor</i>
A	.50	A	.25
B	.40	B	.18
C	.30	C	.10
D	No Weight Assigned	D	No Weight Assigned
E	No Weight Assigned	E	No Weight Assigned

The following is a listing of the weighted courses:

Advanced Placement Biology
 Advanced Placement Calculus AB
 Advanced Placement Calculus BC
 Advanced Placement Computer Science A-JAVA
 Advanced Placement Computer Science Principles
 Advanced Placement Literature and Composition
 Advanced Placement Language and Composition
 Advanced Placement Chemistry
 Advanced Placement Physics I
 Advanced Placement Physics II

Italian III
 Italian IV
 Italian V
 Spanish III
 Spanish IV
 Spanish V
 Pre-Calculus (Dual Enrollment)
 Calculus
 College Algebra (Dual Enrollment)
 Statistics and Probability (Dual Enrollment)

Advanced Placement Physics C
Advanced Placement Physics C: Electricity and Magnetism
Advanced Placement European History
Placement Psychology
Advanced Placement Environmental Science
Honors Communications III
Honors Technology I
Honors Technology II
Honors World Cultures
College Prep English II

Advanced Chemistry (Dual Enrollment)
College Prep English 12 (Dual Enrollment)
CCBC Academies (Dual Enrollment) Advanced
CIHS Argument (Dual Enrollment)
Honors Government & Economics

CREDIT-RECOVERY: Students who fail to pass a required subject course during their freshman, sophomore, junior or senior year must successfully make up the course in an approved credit recovery program to receive their diploma before graduation. A failing grade in a course needed for graduation may prevent participation in the graduation ceremony during their senior year.

As District Policy states: Participation in graduation depends on fulfilling the outlined graduation requirements of the 24.5 credits pending graduation class standing. Should a senior fall short of the 24.5 credits in the required courses, they will not be eligible to participate in the graduation ceremony of their class.

Required subject areas and credit amounts needed for graduation are outlined in the student course selection book. The classes specifically include English, Math, Science, Social Studies, and Health & Physical Education.

To plan accordingly, credit recovery is offered online during the school year at Ambridge Area School District through our cyber program at any time. Information for cyber credit recovery can be found on the Ambridge Area School District website.

A \$130.00 credit recovery fee is attached to each full semester course (1.0 credit) subject and must be paid in full before receiving a diploma. For a half-semester class (0.5 credit), a student will be required to pay \$65.00 for the course. Payments must be made when registering for credit recovery courses. If a payment plan is needed, please contact the appropriate grade level guidance counselor. All fees must be paid in full prior to graduation in order to receive a diploma and to release transcripts. Fees are subject to change during the school year based on enrollment.

If not already doing so, we strongly encourage the student to take the necessary steps for academic improvement before credit recovery, including speaking with their teacher directly to schedule after-school tutoring and/or to arrange in advance a time to receive additional help in the subject area for continued success.

Students and parents will be notified of areas needed for credit recovery during their school year. It is advised the parent/student arrange a meeting to discuss credit recovery options with the Guidance Department during the school year if they have any concerns regarding this opportunity.

TRANSCRIPTS -- Transcripts can be obtained through the Guidance Office. Students are to complete the necessary form and submit it to the secretary. Transcripts will be ready within 24 hours of the request. Transcripts will be forwarded directly to the college or institution. Transcripts, references, and work permits will not be issued until all financial obligations have been met.

SCHOOL TO WORK -- School-to-work options continue to be explored for our students. Those seniors who select the Marketing - On the Job Training (OJT) program are eligible to leave school early and receive credit for working during the school day. Students participating in this program are expected to have regular school attendance.

SPECIAL EDUCATION PROGRAM -- The Special Education Program is designed for students with unique instructional needs defined according to complex criteria established by the Pennsylvania Department of Education and State/Federal statutes. An IEP is developed by parents and teachers to determine each student's course(s) of study. The combination of regular education and special education courses must meet the general requirement, credits, or successfully obtain IEP goals for graduation. A variety of school-to-work opportunities will be explored for students as they demonstrate success in such an environment.

GIFTED EDUCATION PROGRAM -- The Gifted Program is designed for students who possess exceptional academic talent(s) defined according to complex criteria established by the Pennsylvania Department of Education and State/Federal statutes. Under the direction of their parents and teachers, students in this program develop "Individually Prescribed Educational Plans," which determine their course(s) of study. The Gifted Program is an enrichment program.

ADVANCED PLACEMENT COURSES -- Advanced Placement courses are offered in English, Social Studies, Mathematics, and Science. Students taking AP Courses must take four courses in English and Social Studies and a combination of 7 courses in Science and Math.

JROTC -- The Marine Corps and the Ambridge Area School District have joined together to offer a JROTC program for our high school students. Leadership, life skills, and citizenship will be emphasized in this program. Students who sign up will meet for one period a day for the entire year. This promises to be a very exciting opportunity.

SENIOR COMMULATIVE CARE PROJECTS -- All seniors scheduled to graduate are mandated by the Ambridge Area School Board of Directors to complete a senior graduation project. This project must be presented to a committee formed through the High School staff. Failure to complete the project will jeopardize the receipt of a high school diploma. As the school year begins, specific details and guidelines about this project will be published and discussed. Working together, all students will be able to fulfill this requirement.

NCAA ELIGIBILITY -- **NCAA – The National Collegiate College Association:** As per the NCAA, College-bound student-athletes preparing to enroll in Division I or Division II schools need to register with the NCAA Eligibility Center to ensure they have met all NCAA eligibility standards and are academically prepared for college coursework before enrollment in post-secondary athletics. Students exploring post-secondary Athletic Opportunities at the Collegiate Level are strongly encouraged to review the NCAA website for athletic eligibility, requirements, and timelines for The National Collegiate College Association to ensure this action is completed.

Additionally, it is strongly recommended parents/guardians and students review The NCAA Guide for the College-Bound Student-Athlete as your student begins their journey to a Division I, II, or III Athletic commitment. Information can be found at: <https://www.ncaa.org/student-athletes>. Any additional questions can be directed to the District's Athletic Director at this time.

To learn more about the pathway that's right for your student-athlete, please visit <https://www.ncaa.org/student-athletes/future/educational-resources>.

NCAA schools require college-bound student-athletes to build a foundation of high school courses to prepare them for the academic expectations in college.

FULL QUALIFIER: College-bound student-athletes enrolling at an NCAA Division I school need to meet these academic requirements to practice, compete and receive an athletics scholarship in their first year of full-time enrollment. Please review a list of all NCAA-approved courses via your district for completion and enrollment in the correct academic classes.

Complete 16 core courses in the appropriate areas:

- Ten of the 16 core courses must be completed before high school's seventh semester (senior year).
- Seven of the ten core courses must be English, math, or natural/physical science. **NCAA: Students taking Algebra IA and IB will only receive 0.5 credit for each full year class towards the NCAA eligibility and will be required to meet other core classes before 7 semesters as per the NCAA.*
- Earn a core-course GPA of at least 2.300.
- Earn an SAT combined or ACT sum score matching the core-course GPA on Division I sliding scale.
- Submit proof of graduation to the Eligibility Center. **ACADEMIC REDSHIRT** All Division I academic redshirts may receive an athletics scholarship and practice during their first year of full-time enrollment at a Division I school but may NOT compete.
- Complete 16 core courses in the appropriate areas.
- Earn a core-course GPA of at least 2.000.
- Earn an SAT combined score or ACT sum score matching the core-course GPA on Division I sliding scale.
- Submit proof of graduation to the Eligibility Center.

INTERNATIONAL STUDENTS: Please review the international initial-eligibility flyer for information and academic requirements specific to international student-athletes.

What are core courses?

Not all high school classes count as NCAA core courses. Only courses in English, math (Algebra 1 or higher), natural or physical science, social science, foreign language, comparative religion, or philosophy may be approved as NCAA core courses. Remedial classes and classes completed through credit-by-exam are not considered NCAA core courses.

Classes that are NCAA core courses include:

- English: English 1-4, American Literature, creative writing
- Math: Algebra 1-3, Geometry, statistics **NCAA: Students taking Algebra IA and IB will only receive 0.5 credit for each full year class towards the NCAA eligibility and will be required to meet other core classes before seven semesters as per the NCAA.*
- Natural of physical science: biology, chemistry, physics
- Social science: American History, civics, government
- Additional: comparative religion, Spanish 1-4

Classes that are not NCAA core courses include:

- Classes in non-core areas, fine arts, or vocations such as driver education, typing, art, music, physical education, or welding.
- Personal skill classes such as personal finance or consumer education.
- Classes taught below grade level, at a slower pace, or with less rigor or depth. These classes are often titled basic, essential, fundamental, or foundational.
- Classes that are not academic in nature, such as film appreciation, video editing, or greenhouse management.

If you take a high school class such as Algebra 1 or Spanish 1 before you start ninth grade, the class may count for your 16 core courses if it is on your high school's list of approved core courses and is shown on your high school transcript with a grade and a credit.

Credit

You can earn credit for a core course only once. If you take a course that repeats the content of another core course, you earn credit for only one of these courses, and the higher grade counts toward your core-course GPA.

Students will not be able to accumulate more than 10.00 credits per year unless done via credit recovery to make up for previous academic deficits. Students must have signatures via a parent/guardian for enrollment in credit recovery, changing a class and/or moving a class. Please review the Withdraw-Fail policy for changing classes during the academic school year. Students are not able to double up on English or Social Studies credits in the same school year, as these academic classes are required to be credit recovery as students are only permitted to have 1.00 credit in each area per year, for a total of 4.00 credits in grades 9-12th. *Summer credits taken at a post-secondary institution will not be approved for high school credit towards graduation. Gym or PE classes cannot be taken over the summer for credit towards graduation. No credits taken over the summer at a post-secondary institution, for example at PSU Beaver or CCBC, will be added to their High School transcript for graduation credits.*

Students attending via Teams are required to commit to a 9-week time commitment in order to enroll in the classes via teams with approval of administration. If there are academic difficulties after the 4-week academic mark, the team can review the placement of Teams learning. Students are not permitted to switch during a 9-week academic time frame and a parent/guardian signature is required to acknowledge this agreement with the administrative team.

Please note the following policy board approved credits: Any Ambridge Area Middle School student that has taken Middle School Spanish I, Spanish II, Italian I, Italian II, Plane/Solid Geometry, Honors Plane/Solid Geometry, Algebra II and Honors Algebra II, or Advanced English 9, College Preparatory English 9 and has passed these course(s) since the inception of the accelerations program will receive high school credit on their transcript without adding the grade for these given classes onto the High School Transcript Grade Point Average. Students must achieve an 80% or better as a prerequisite to continue with the acceleration opportunities in each academic area of study. Students not meeting this prerequisite can complete a parent/guardian waiver form. With the understanding that, NCAA may calculate the grades into the final GPA as they are at the High School level even if separate from our policy. The courses must be included at the High School level Course of Studies book as the NCAA approved courses. Any student that utilizes the above mentioned acceleration opportunity understands that no additional courses beyond the courses listed in the course description book will be created. Furthermore, the Ambridge Area School District will not be responsible for any post-secondary costs incurred. *Attendance: Students that are marked medical are required to provide an updated medical report from a doctor and or health provider each academic school year with signatures in order to be excused medical or excused medical for any tardy. The medical must be applicable to the current school year, and cannot carry over from previous years. This is to be reviewed each academic year with the school social worker, IEP or 504 team, and administration. If student does not have a medical and unsuccessful in passing the 60% mark, students will be required to enroll in credit recovery and adhere to the attendance policy at the district level.*

Division I additional core course

Division I schools allow you to complete one additional core-course unit after you graduate high school, as long as you graduate in eight semesters after you begin ninth grade. The additional core-course unit must be completed within one year after your high school graduation and must be completed before you enroll in college.

The additional core course unit may be taken at a different school than the high school from which you graduated as long as the class is on the new school's list of approved NCAA core courses. Take the additional core course at a school other than the school from which you graduated. You must provide the NCAA Eligibility Center with an official transcript from the new school showing the additional core-course grade and credit.

If you take the additional core course through a program that does not award credit, the course must be awarded credit by a credit-awarding high school.

Grade 9

Ask your Athletic Director for a list of your high school's NCAA core courses to make sure you take the right classes. **NCAA: Students taking Algebra IA and IB will only receive 0.5 credit for each full year class towards the NCAA eligibility and will be required to meet other core classes before seven semesters as per the NCAA.*

Grade 10

Register with the NCAA Eligibility Center at eligibilitycenter.org.

Grade 11

Check with your counselor to make sure you will graduate on time with the required number of NCAA core courses. Take the ACT or SAT and submit your scores to the NCAA using code 9999. At the end of the year, ask your counselor to upload your official transcript to the NCAA Eligibility Center.

Grade 12

Finish your last NCAA core courses. Take the ACT or SAT again, if necessary, and submit your scores to the NCAA using code 9999. Complete all academic and amateurism questions in your NCAA Eligibility Center account at eligibilitycenter.org. After you graduate, ask your counselor to submit your final official transcript with proof of graduation to the NCAA Eligibility Center.

Division I academic eligibility

To be eligible to compete in NCAA sports during your first year at a Division I school, you must graduate high school and meet ALL the following requirements:

Complete 16 core courses:

Four years of English

Three years of math (Algebra 1 or higher) **NCAA: Students taking Algebra IA and IB will only receive 0.5 credit for each full year class towards the NCAA eligibility and will be required to meet other core classes before 7 semesters as per the NCAA.*

Two years of natural/physical science (including one year of lab science if your high school offers it)

One additional year of English, math, or natural/physical science

Two years of social science

Four additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy

Complete ten core courses, including seven in English, math, or natural/physical science, before your seventh semester. Once you begin your seventh semester, you may not repeat or replace any of those ten courses to improve your core-course GPA.

Earn at least a 2.3 GPA in your core courses.

Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division I sliding scale, which balances your test score and core-course GPA. If you have a low test score, you need a higher core-course GPA to be eligible. If you have a low core-course GPA, you need a higher test score to be eligible.

What if I don't meet the requirements?

If you have not met all the Division I academic requirements, you may not compete in your first year at college. However, if you qualify as an academic redshirt, you may practice during your first term in college and receive an athletics scholarship for the entire year.

To qualify as an academic redshirt, you must graduate high school and meet ALL the following academic requirements:

Complete 16 core courses:

Four years of English

Three years of math (Algebra 1 or higher) **NCAA: Students taking Algebra IA and IB will only receive 0.5 credit for each full year class towards the NCAA eligibility and will be required to meet other core classes before seven semesters as per the NCAA.*

Two years of natural/physical science (including one year of lab science if your high school offers it)

One additional year of English, math, or natural/physical science

Two years of social science

Four additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy

Earn at least a 2.0 GPA in your core courses.

Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division I sliding scale.

If you are concerned you may not meet the Division I academic requirements, consider taking the following actions:

Ask for advice and accountability from the high school athletic director. Check-in with the admissions or compliance office at the college you hope to attend.

Get tutoring or other study help.

Graduate on time. Division I schools allow college-bound student-athletes who graduate on time to take one core course during the year after they graduate high school.

Avoid quick fixes through credit recovery programs. These courses may not be accepted by the NCAA.

Keep your coursework. If the NCAA Eligibility Center needs to review your record due to irregularities, you may be asked to provide your coursework.

Follow your high school's policies. The best thing to do is work within the rules.

COLLEGE PREP CURRICULUM -- College-bound students are strongly encouraged to take college prep courses to ensure success at the college level. Research has shown that students who take the Honors and advanced courses do extremely well when they leave high school and go on to higher levels of learning. Please keep this in mind when making all selections.

PLANNING FOR POST HIGH SCHOOL EXPERIENCES -- Beginning with ninth grade and continuing through tenth and eleventh grades, students are advised to study entrance requirements. The High School Guidance Office has a number of resources for researching career and post-secondary education choices. Catalogs for many colleges, universities, trade schools, nursing schools, etc., are available to aid students and their parents in determining their eligibility for admission. Students are encouraged to talk with acquaintances, friends, relatives, and parents already employed in areas of future interest and check with counselors to make certain that they will meet the requirements necessary to enter their chosen field of endeavor.

NATIONAL HONOR SOCIETY -- AAHS is proud to recognize successful students. Selection into the National Honor Society is a great achievement for any student. The selection process begins with academics. Students must qualify with specific grade point averages. Juniors must have a cumulative 3.6 or higher after five semesters. Seniors can qualify with a cumulative 3.6 after seven semesters. In addition to these grade point requirements, students will also be evaluated on their involvement in activities and clubs, as well as character ratings.

HIGH HONOR ROLL & HONOR ROLL -- To be on the High Honor Roll, students must earn an "A" grade in all subjects meeting five days per week. There may be one grade of "B" in one of these subjects. There may be no grade lower than a "C" in subjects meeting less than five times per week. An incomplete "I" grade disqualifies a student from the High Honor Roll.

Students must earn a "B" in all subjects, meeting five times per week to be on the Honor Roll. There may be one grade of "C" in one of these subjects. There may be no grade lower than a "C" in subjects meeting less than five times per week. An incomplete "I" grade disqualifies a student from the Honor Roll.

The honor roll will be generated four times a year and based only upon grades for each nine weeks.

REGISTRATION INSTRUCTIONS -- Planning your schedule for senior high school requires an appraisal of your capabilities, interests, goals, and past performance. You should become familiar with the courses of study and prerequisites necessary to meet graduation requirements and future goals. The course offerings at the high school are flexible enough so that all students, regardless of their post-graduation plans, may take a variety of elective courses. Please remember that changes are discouraged after August 1st of the upcoming school year because of staffing, class size, and budgetary decisions.

Students should review this course booklet in order to make informed choices concerning their future schedules. After consulting with your subject teachers, counselor, and parents, the completed schedule form must be returned to the Guidance Office with the parent's signature. All students must plan a schedule that fits into a nine-period day and should include lunch.

Students who fail to do this will not be scheduled in a timely fashion and may not receive the courses of his/her first choice. Students must fill in at least two alternative elective selections if changes need to be made. If these procedures are followed, your proposed schedule should require no changes. If a schedule form with the parent's signature is not returned to the Guidance Office, a schedule will be devised based on requirements and the student's past performance.+

AMBRIDGE AREA CYBER ACADEMY:

The Ambridge Area School Board approved a partnership between Ambridge Area School District and Seneca Valley Academy of Choice, resulting in the creation of our own cyber/hybrid alternative for students. Highlights of the Ambridge Area Cyber Academy are as follows:

1. Free personalized education plan for AASD students
2. Resources of caring, highly qualified AASD professional staff
3. A Cyber Lab to utilize at the high school
4. An array of extracurricular activities and clubs
5. Flexibility of scheduling, guidance counselor services, and scholarship opportunities
6. Opportunities to be creative, productive, discover, and explore potentials
7. Teaches students responsibility, time management, self-discipline, dedication, independence, and a global perspective
8. Upon completion of all graduation requirements, students will graduate with an Ambridge Area Diploma
9. Courses are aligned to the AASD Common Core Curriculum
10. Students will earn letter grades on both report cards and transcripts
11. If meeting eligibility, students can also participate in all Ambridge Area-sponsored events, including Homecoming, Prom, graduation, athletics, and activities.
12. Physical Education can be completed at a local gym as a Pass/Fail course. (Medical Documentation on file may be required and at the administrations' discretion before acceptance in a cyber PE course.) Any fees required to join a local gym will be absorbed by the student for taking the course.
13. Health screenings are offered at school

Requirements / Pre-Requisites:

1. Any senior enrolled in the cyber academy must complete all graduation and senior requirements before graduation to receive their diploma.
2. An application to enroll in the cyber program **must be completed online** before enrollment on the district website at www.ambridge.k12.pa.us.
3. To enroll in a cyber-program, it is suggested to enroll during the beginning (first week) of each 9-week grading period.
4. The timeframe for scheduling is due to the nature of classes being assigned as a nine-week portion of a curriculum. Adhering to this schedule will ensure that no student has insufficient time to complete the required amount of work for a grading period.
5. Enrollment past the scheduling time frame will be reviewed as per case-basis. Exceptions to the enrollment period and curriculum will be at the discretion of the administration.
6. Medical documentation may be required for cyber enrollment, including but not limited to enrolling in the Health and Physical Education cyber program.
7. Once an application is received, it will be reviewed by our educational team to determine the best placement for the student.
8. A parent/teacher conference may be scheduled to determine the best course of action for the student.
9. The criteria for enrollment that are examined include the following: Attendance; Motivation and Potential Success; Academic Success; Medical Documentation as per need basis.
10. Students must complete all requirements as listed.
11. Attendance by actively logging in and completing the material is mandatory and will be monitored. Any violation of not actively completing the course hours required online will be handled through our administration and truancy office.
12. Students required to take the Keystone Exams based on courses scheduled must report to the school to do so as per state requirements.

If you would like to know more about our program, please feel free to contact the district at 724-266-2833 and/or visit the district website at www.ambridge.k12.pa.us.

WITHDRAWN-FAILING POLICY AND CODE: It is advised that a student only "Withdrawal-Fails" a course under extenuating circumstances due to the finalization of information on their permanent educational record. The student is encouraged to work towards achieving *at a minimum* a passing grade (60% or above) to ensure earned quality points are received in lieu of receiving a "0" for quality points, an "F" in the class, and zero (0) earned credits.

If a class is dropped *after* the first week of the course or at any point thereafter in the school year, the grade in that subject area will be "W-F" or "Withdrawn-Failing." A "W-F" under school policy and code will be computed in the student's overall grade point average as an F (0 quality points), and zero credit will be received for that class. A student may be required to make -up the credit if needed for graduation.

A "Withdrawn-Failing" or "W-F" will be factored into a student's overall cumulative grade point average during their high school years, which may significantly decrease the student's overall earned grade point average. The grade will also be placed on their permanent educational record and transcript. Any student who opts to receive a "W -F" will receive 0 quality points that are factored into their final cumulative grade point average and reflected on their final transcript upon graduation.

Due to the "W-F" placement on a permanent educational record and final transcript, we strongly advise the student to take the necessary precautions and steps before withdrawing from the class. Students are advised to use the educational resources available throughout the school year, including checking Tyler for weekly grades and assignments for any due or missing work to ensure work is completed in a timely manner.

We also strongly encourage the student to speak with their teacher directly to schedule tutoring after school for academic success and/or arrange a time to receive additional help in the subject area before withdrawing from the class. Failure letters are also delivered each quarter to ensure all members involved in the student's educational plans are aware of the current grades throughout the academic school year.

To ensure active learning, students are also encouraged to continue maintaining positive attendance, actively participating in class, and ask any questions if the material is not understood.

Additionally, a parent/teacher conference should be held to discuss the matter further to determine if dropping the class is the best course of action for the student. As understood, special circumstances may arise, in which case the administration will review the student's educational information and make the final determination at their discretion.

Before "Withdrawn-Failing," a parent/guardian signature and the teacher of record must be on file to ensure all parties are notified of the decision. In every effort to ensure a collaborative approach, a "Withdrawn-Failing" form must be completed to ensure all information regarding the decision and policy is disclosed and acknowledged before approving the student's request.

As always, if you have any questions or academic concerns regarding the specific subject area, you may contact the student's teacher of record directly from the directory provided on the District Website. For additional educational guidance and information, questions may also be directed to the Guidance Department at any time.

STUDENT TRANSFER OF CLASSES / SCHEDULE CHANGES: Any course, whether semester or a full year in length, which is dropped or changed before the drop-add deadline is over (*1-week scheduling timeframe*), will not appear on the student's transcript or be factored into the cumulative grade point average of the student. We advise the student to make any schedule changes during the drop-add time frame with their school counselor to ensure their scheduling needs are met.

When a student transfers from one course to another within the same subject area after the midpoint of the first quarter, the grade will also be transferred.

Questions in regards to scheduling or a request for additional information is available in the Guidance Office at (724) 266 – 2833, ext. 2377.

TESTING INFORMATION -- The testing program at the high school encompasses a variety of tests that serve several purposes. While some of these tests are mandated, others are administered as a service to students and their families.

PSAT 8/9: All 9th-grade students will be eligible to take the exam in the spring of their freshman year. Students will cover the cost of the exam.

PSAT 10: All 10th-grade students will take this exam in the spring of their sophomore year. The district will cover the cost of the exam. PreACT: All 10th-grade students will be eligible to take the exam in the spring of their sophomore year. Students will cover the cost. ASVAB: All 10th-grade students will take this exam in their sophomore year. No cost to students.

PSAT/NMSQT: Optional to all 11th-grade students. The test will take place in the fall of their junior year. Students will cover the cost of this exam.

ACT: All 11th-grade students will test in the spring of their junior year during the school day. The district will cover the cost of this exam.

SAT: SAT Saturday testing will be offered in October and March at Ambridge Area High School.

The following chart provides basic information on the Ambridge Area School District testing schedule:

GRADE LEVEL	TEST	DEFINITION OF TEST	PURPOSE
9	Common Assessments	Algebra I, Biology	Assess student growth
	AP Testing	Algebra I, Biology	State Assessment
	PSAT 8/9	Everfi	Compare interests and abilities with available options and training programs
	Keystone Exam		
	Career Interest Survey		
10	Common Assessments	Algebra I, Biology,	Assess student growth
	AP Testing	Literature Algebra I, Biology,	State Assessment
	Keystone Exam	Literature Preliminary	Acquaint students with SAT material
	PSAT 10	Scholastic Aptitude Test	Assess student aptitude
	PreACT	Everfi	
	ASVAB	Armed Services Vocational Aptitude Battery	
11	Common Assessment	Algebra I, Biology, Literature	Assess Student Growth
	Keystone Exam	As Needed	State & District Mandated
	PSAT/NMSQT	Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test	Acquaint students with SAT material
	AP Testing	Work Keys	College placement evaluation
	SAT I	Advanced Placement Testing	College admission evaluation
	SAT II	Scholastic Aptitude Test American College	College admission Evaluation
	ACT	Everfi	College admission evaluation
12	Common Assessments	Scholastic Aptitude Test	College Admission evaluation
	SAT I	Work Keys	College Admission Evaluation
	SAT II	Aptitude Test	College Placement evaluation
	AP Testing	Advanced Placement	College Admission evaluation
	ACT	Testing American	

PLANNING FOR COLLEGE

STEP ONE

Select appropriate courses and a challenging academic program. Consult the Guidance Department for the Recommended Course Sequences charts for appropriate English, Math, Science, and Social Studies courses. Plan as rigorous a program as you can within your abilities.

STEP TWO

Give your studies maximum effort. Although all phases of your high school record are considered for college admission, scholastic achievement is the most important single item. College admissions officers have learned that a student's quality of work in high school is the best predictor of success in college.

Maximum effort means more than doing your homework, completing course assignments on time, and studying for tests. It means making sure that a part-time job does not interfere with schoolwork. It means asking for help from your teachers if you are having difficulty or have missed classes because of illness.

STEP THREE

Plan a well-rounded program. Colleges are interested in the degree to which a student has contributed to the life of the school or community. Make sure that a part-time job does not prevent you from participating in athletics, music, drama, or other school activities which interest you.

Depth in your activities is also important; the fact that you were responsible for a complete redesign of your student newspaper, for example, would mean more than just listing "newspaper" on your transcript.

If you plan to apply to highly selective schools, it is essential to have something that will set you apart from the thousands of other applicants who also have good grades and SAT I scores. An outstanding admissions interview or especially thoughtful and well-written answers to essay questions on your application can make a difference.

Mention special talents, abilities, achievements, or experiences, which might not be included in our high school record, such as extensive travel, fluency in another language, or ability in a non-school area such as ballet or gymnastics.

STEP FOUR

Find out all you can about colleges and the application process. School counselors are your best source of information about college selections, admissions, procedures, and testing schedules. Students should talk to counselors regularly and keep them informed of plans.

Both you and your parents should plan to attend at least one of the evening financial aid information programs provided by the Guidance Department, along with the College Fair, which is scheduled each spring locally. Colleges also send representatives to our high school throughout the year to meet with interested students.

The Guidance Office contains a wealth of resource materials, including college guides, catalogs, videos, and computer programs that you and your parents may view.

After learning all you can about the application process, you should write to colleges for information and application forms. It's also important to visit the colleges which interest you so that you can schedule interviews with admissions counselors and get a real idea of what the school and campus are like.

STEP FIVE

Write all college letters and applications with care and come prepared for college interviews. Students should ensure that all written communications to a college -- even a simple request for information -- are neatly written and proofread.

If you wish to be considered for financial aid, add this sentence to your letter asking for an application: "My parents will be filing the financial aid form with the College Scholarship Service, and I am asking that a copy of the statement be sent to you so that I may be considered for financial aid. If your college has a special form for applying for such aid, I would appreciate its inclusion with the admission application."

Come to college interviews on time, appropriately dressed, and prepared with thoughtful questions. Send a letter of thanks after the interview.

Students are often overwhelmed by applications when applying for college, especially applications which ask for extension essay questions. Be sure to give yourself plenty of time to fill them out before the deadline.

Take time with essay questions. Revise and edit your responses and have someone proofread your answers before you write them on the application.

When personal or teacher references are required, ask the permission of the individuals whose names you intend to give. If the college has sent reference forms or requested letters, provide an adequate number of stamped, addressed envelopes to your references.

Give teachers, counselors, or community members plenty of advance notice to write recommendations for you. They have many demands on their time, and a hastily written recommendation will not help your application.

Official transcripts must be mailed with your application from the Guidance Office. It takes time for the office to prepare your transcript, especially when many students are applying to college at the same time—request transcripts at least a week in advance of when you will need them.

Once you have completed an application, attach a check or money order for the application fee and submit the application to your counselor, along with a Transcript Request Form (available in the Guidance Office) and an addressed envelope with sufficient postage. Please allow two weeks or more for your application to be processed.

Don't forget to request that SAT I, ACT, and SAT II scores be sent to the colleges you apply to. The Guidance Office can supply the necessary information about how to do this.

STEP SIX

Choose the best college you and your family can afford. For many students, this means exploring all options for financial aid. Financial aid packages include grants based on student need; scholarships awarded based on ability alone or ability combined with need; work-study programs; and low-interest student loans, which must be repaid after graduation. See your guidance counselor on how to apply for financial aid.

Along with filling out the required forms for college financial aid, you should explore all other scholarship opportunities. Some scholarships are based on need, some on academic achievement or special talent, and some are even more specialized. Your counselor can help you with scholarship information.

Scholarship announcements and college information are provided throughout the year in the Guidance Office.

Plan to participate in the pre-examination for practice and preparation, including the PSAT 8/9, PSAT 10, Pre-ACT and the PSAT/NMSQT. Practicing the exams provided by the Ambridge School District will allow exposure and assistance to the testing format, structure, and test questions before the college examination.

Colleges also consider your scores on the Scholastic Aptitude Test (SAT I), SAT II, or Advanced Placement examinations. The PSAT 8/9, the PSAT 10, PreACT, ASVAB, and the PSAT/NMSQT will give you valuable experience in preparing for the more important SAT I exam.

Scores on the PSAT taken by juniors are used to determine National Merit Scholarship Test semifinalists and commended students for the following school year. Students should be sure to take the test in their junior year even if they have taken the test as sophomores.

Students should not take either the PSAT or the SAT I without careful preparation. It is recommended that a student should not take the SAT I without completing Algebra and Geometry since these skills are required for the math portion of the test. At the very least, students should carefully read the PSAT and SAT I books prepared by the Educational Testing Service and provided by the Guidance Office when you register for the test. The books contain valuable test-taking tips and information, along with practice tests. More selective colleges also require students to take one or more SAT II and the SAT I, otherwise known as the SAT Subject Tests.

Students who take Advanced Placement courses will be expected to take the appropriate AP examination. When you take the AP examination, you can compare your ability with students across the country. A good AP score will also reflect well on academic abilities when colleges consider a transcript. If the score is high enough on the AP exam (qualifying scores vary among colleges), many colleges will award college credits and permit skipping the beginning level of a course. This can save a student both money and time.

Students sometimes hesitate to take the AP exam because they intend to take the beginning course in college, no matter how well they may score on the exam -- especially when the college course is in the area of their intended major. But even if a high AP score is achieved, any courses can still be selected in college. No college will require that a course be skipped.

Please remember that students must register for all these tests well before the date they are given. All application forms and test information can be obtained from the Guidance Office or www.collegeboard.com.

Ambridge Area High School's code for the SAT I, and the ACT is **390070**.

ADMISSION CRITERIA AT COMPETITIVE COLLEGES

- | | |
|--------------------------------------|---|
| 1. Courses Taken | 6. Application Questions and Essays |
| 2. Grade Point Average | 7. Personal Interview (if available) |
| 3. ACT Scores | 8. Activities Outside The Classroom |
| 4. SAT I Scores (possibly SAT II) | 9. Special Talents, Skills, and Interests |
| 5. Counselor/Teacher Recommendations | |

BEAVER COUNTY CAREER AND TECHNOLOGY CENTER

Students must complete and submit their application for attending the Beaver County Career and Technology Center to the Transition Coordinator before scheduling the next school year. Student grades, attendance, and the number of seats available at the BCCTC determine program acceptance. Applications for the BCCTC will not be accepted during the summer break. Students who miss more than ten absences will be placed on administrative review. This review will determine if the student will continue his/her program at the Beaver County Career and Technology Center. Students who complete their designated program will receive 3 elective credits and one additional Math AND Science credit towards Ambridge Area High School graduation requirements.

The Beaver County Career and Technology Center is an extension of your senior high school, which offers vocation -technical courses. Each occupational program prepares students to enter the job market with a salable skill. Career and technology courses are two-year programs for students enrolled in grades 11 and 12, which meet three hours per day for a total of 1080 hours. Students interested in the Cosmetology Program should see their guidance counselor as the requirements differ slightly for this program. Students participating in the Cosmetology Program will need to start in the 10th-grade year.

As it applies to student selection, the decision-making process becomes a cooperative procedure shared by both the home school and the BCCTC counselor, with the final decision made at the home school. Each student/applicant will be notified in writing of the student's acceptance to attend the BCCTC as soon as possible after the decision has been made.

An Orientation Program is held for all 10th-grade students, followed by a visit to the Beaver County Career and Technical Center for all students interested in a technical program. Past grades and daily attendance are factors, which determine eligibility, as well as meeting graduation requirements. Where prerequisites are required, the requirement must be fulfilled before the student is considered for the course.

COURSES OFFERED

Automotive Technology	Greenhouse/Landscaping
Business Information Systems	Health Occupations
Carpentry	HVAC-R
Collision Repair Technology	Logistics & Materials Management
Commercial Art & Design	Machine Tool Technology
Cosmetology	Masonry/Bricklaying
Culinary Arts	Veterinary Assistant
Electrical Occupations	Welding
Graphic Arts & Printing	

CCBC COLLEGE IN HIGH SCHOOL PROGRAM

Enroll in one of Community College of Beaver County's High School Academies to jump-start your college education and discover the career that's meant for you. CCBC's High School Academies are providing Western Pennsylvania's young people with high-impact educational experiences to prepare them for careers that address priority workforce needs of the region. Launched in 2015 with the Aviation Academy, the CCBC High School Academy program now educates more than 170 students from 40 school districts throughout Western Pennsylvania through an innovative dual enrollment model in which students have the opportunity to explore careers in areas of workforce priority for the region while receiving hands-on instruction from college faculty in labs and classroom environments that stimulate critical thinking and problem-solving skills.

Students who devote two years of study to the program will have the opportunity to graduate from high school having completed up to one year of credits toward CCBC's associate degree programs, or they can transfer the credits to other colleges and universities. Through partnerships with more than 600 four-year college programs nationally, many academy graduates can complete a bachelor degree in three years or less.

***Community College of Beaver County Academies (CCBC):** Students are required to complete all Academy Programs at the CCBC Campus while enrolled at the High School level for Collegiate Credit in their corresponding academy program. All classes will be conducted and taught via CCBC Academic staff. If accommodations are required, all students are required to meet with the Student Services Office of Academic Affairs on Campus to apply for accommodations within the Collegiate Courses and are based on the Collegiate level approval. All credited classes and programs corresponding to the academy at CCBC will be reflected on the CCBC transcript for Collegiate Credit and on the Ambridge Area School District Academic History and Transcript each academic year enrolled in the program.

Students can earn up to 6.00 credits per academic school year at the Ambridge Area School District towards graduation while enrolled in a Community College of Beaver County Dual Enrollment Academy Program. Students will earn 1.00 credit per class in which they are enrolled in at the Academy. Classes will be reflected as CCBC Academy on the High School Transcript to reflect enrollment in the Academy, respectively. All Courses will be weighted as Dual Enrollment and the final grade point average for each course will be based off the final grade earned in the CCBC Academy. At the end of each academic school year, final grade point averages will be calculated in collaboration with courses taken in CCBC and at the Ambridge Area High School.

At CCBC, students will complete 4 Semesters – 2 Fall Terms and 2 Spring Terms starting in their Junior Year for program enrollment. Credit will be given for core classes based on the review of the academic transcript and classes taken at CCBC. All information and program curriculums can be found on the CCBC website at: <https://www.ccbc.edu/high-school-academies>.

CHOOSE AN ACADEMY:

See what you can do. Choose the High School Academy that most interests you to get started from the list below:

- Aviation Academy
- Health Academy
- STEM Academy – Choose out of the 3 presented tracks
- Criminal Justice Academy
- MASCARO Construction Academy
- Education Academy

Steps to Apply:

Application: Applying is simple: Please see your Junior – Senior Level Counselor for an application, and/or download on-line: To download the Application, please click on the appropriate application at <https://www.ccbc.edu/high-school-academies>

Complete the Application: Take some time to fill out the application completely and make sure you review it with your family. If you're undecided on a career path, give our staff a call and we can help you narrow down your selection. Once you have your information filled in you will need to obtain proper signatures from your school and a copy of your high school transcript to be sent with your finalized application.

Send It Back: Once you complete the application, you can scan it and email it, along with a copy of your high school transcript to Lia Hazelwood at lia.hazelwood@ccbc.edu alongside your 11th and 12th grade school counselor.

Wait for It: Give us some time to process the paperwork and then we will let you know if you are accepted. Acceptance letters begin to go out during the latter part of the spring semester. Be sure to review the tuition refund policy and our tuition due dates and refund dates on our academic calendar. Scholarships are available for qualified students. Please contact the CCBC Financial Aide office for further information.

All information and program curriculums can be found on the CCBC website at: <https://www.ccbc.edu/high-school-academies>

All students are bound by the Community College of Beaver County (CCBC) Student Financial Responsibility Statement upon course registration. The Statement outlines the business terms and conditions associated with your booking. By registering for classes, you assume financial responsibility and agree to the terms of the Financial Statement. Please note, students who attend the CCBC Academies and Dual Courses are to discuss the cost and information with the CCBC financial aide office and set up a financial aide appointment after acceptance into the program. All costs and payment plans will be through CCBC and their financial aide office.

Ambridge Area High School is not responsible for the coverage of any cost associated with CCBC Academies at any point during the student's enrollment. All students must review CCBC's tuition refund policy and the tuition due dates and refund dates on their academic year calendar. For more information regarding the cost and paying for Dual Enrollment tuition, please contact the Financial Aide office at CCBC.

The CCBC Financial Aide Services Department is committed to guiding you through the process of understanding how to pay for your education at CCBC. Please review the Financial Aid Guide for more information when applying for aid.

Office of Financial Aid Hours:

Monday, Tuesday, Thursday, and Friday: 8:00am to 4:30pm

Wednesday: 8:00am to 7:00pm

For additional information or assistance, please contact:

Phone: 724-480-2222 opt#2 or 724-480-3501

Fax: 724-480-3569 or email financialaid@ccbc.edu

CCBC AVIATION ACADEMY

Ambridge Area High School is proud to be associated with the CCBC Aviation Academy. We offer dual enrollment for students interested in aviation careers who also meet the program requirements, as specified by CCBC. Students in grades 11-12 are eligible for this program. Additionally, monetary fees are determined by CCBC. Additional information of this program can be found in the Guidance Office or by contacting the Aviation Director Jeremy Ravotti at 724-480-3609 or via e-mail Aviationchampion@ccbc.edu. Students enrolled in the CCBC College in High School Program will earn (1.00) Math, (1.00) Science, and (3.00) elective credits towards graduation at Ambridge Area High School.

FALL SEMESTER

AVIP100

TITAN TRANSITION

This course emphasizes the growth of the aviation student, both academically and personally. Students become part of the learning community at CCBC through an orientation to the campus, airport technology, services and by acquiring knowledge of the culture of higher education. This course is a required for all aviation students.

AVIP102

INTRODUCTION TO AVIATION

A computer course designed to introduce students to personal computers. Topics include basic concepts of computer operations, storage media, software categories, Windows operating system, computer communication devices, and the Internet. The course also includes introduction to Microsoft Word, Excel, Access and PowerPoint.

WRIT 101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed.

SPRING SEMESTER

AVIP 160

PRIVATE PILOT FLIGHT THEORY

This course is designed to provide the basis for Air Traffic Control Training. The student will learn the principles of flight, basics of air traffic control, weather facts, and navigational equipment and procedures.

FALL SEMESTER

AVIP 101

HISTORY OF AVIATION

Historically, the development of aviation was closely aligned with Western civilization. Therefore, History of Aviation provides students with a solid foundation from a near-global perspective, beginning with the earliest myths and legends through the advent of powered, heavier-than-air flight. As Aviation emerged as a major catalyst, dramatic changes occurred in economics, foreign policy, and communications. With a foundation of interdisciplinary knowledge in place, the course asks students to assess how the emergence of key aviation technologies has impacted varied Nations and cultures across the globe as diverse as there are differing demographics.

The course will end with a consideration of futurist perspectives on the role of aviation as a global, dynamically charged, force.

MATH 126

STATISTICS

This course is an introduction to a field whose ideas and concepts pervade modern society and whose importance in business, technology, science and research in general is considerable and ever growing. The course consists of three parts, namely, descriptive statistics, probability and inferential statistics.

SPRING SEMESTER

AVIP 205

AIRCRAFT ENGINES & SYSTEMS

Students will acquire the knowledge of construction, operation and components of reciprocating and jet power-plants. They will understand the operation and components of cabin pressurization and air conditioning systems, flight control systems, landing gear systems, fuel systems, electrical systems, anti-icing systems and fire detection systems.

AVIP 260

HUMAN FACTORS THEORY

This course provides students with a detailed introduction to aspects of aviation safety and the associated components of pilot psychology, human factors, aircraft technology and aeromedical physiology. Emphasis will be on resource management in single pilot and multicrew member operations.

CCBC HEALTH ACADEMY

The CCBC Healthcare Academy gives students the opportunity to earn up to 28 college credits toward an associate degree in nursing or radiologic technology as well as a diploma in practical nursing. Students can enter into the program at the beginning of their junior year as long as they meet the following requirements: Grade point average of 2.75, Good Attendance, Good Conduct, and recommendation from principal or guidance counselor. High School prerequisite courses: Biology with lab, Chemistry with lab, Algebra I, Algebra II or other college preparatory math. Any questions please contact the office of the Health Academy Director Sherri Busch at 724-480-3489 or via e-mail at HealthChampion@ccbc.edu. Students enrolled in the CCBC College in High School Program will earn (1.00) Math, (1.00) Science, and (3.00) elective credits towards graduation at Ambridge Area High School.

FALL SEMESTER

HLTH 101

COLLEGE SUCCESS STRATEGIES FOR HEALTH CAREERS

This course empowers students to reach their educational and professional goals by examining learning strategies and skills for success and gaining an understanding of the commitment needed to flourish in challenging nursing and allied health higher education programs. Students are introduced to health care careers at Community College of Beaver County and oriented to academic resources, program requirements, policies, and procedures typical to institutions of higher learning. Students also consider the importance of lifelong learning and success in the professional healthcare workplace.

BIOL201

HUMAN ANATOMY & PHYSIOLOGY I

This course is a basic study of human anatomy and physiology. Topics include levels of organization, body divisions and cavities, basic biochemistry, cell structure and metabolism and histology. Structure and physiology of the following systems include integumentary, muscular, skeletal, respiratory, and urinary. Fluid and electrolyte balance is also discussed. The laboratory is an integral part of the course.

SPRING SEMESTER

WRIT101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed.

Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College Writing if required; permission of the Division Director

BIOL202

HUMAN ANATOMY & PHYSIOLOGY II

This course is a continuation of BIOL201. Structure and physiology of the following systems are included: nervous and its divisions – endocrine, cardiovascular, lymphatic, digestive, and reproductive. Other topics including the composition of blood, immunity, human genetics, and development are also discussed. The laboratory is an integral part of the course.

FALL SEMESTER

HSC1203

INTRO TO HEALTH CARE INFORMATICS

This course is designed to provide students with concepts about information technology by demonstrating skills such as basic computer literacy, acknowledging reliable internet resources and integrating patient care technologies into safe health care practice. Students considering nursing or other healthcare careers will benefit from the information provided.

PSYC101

GENERAL PSYCHOLOGY

This course examines the scientific study of behavior and mental processes and provides a survey of the major areas of psychology. Important topics and findings from psychology are reviewed. Topics include the role of science in the study of behavior, the biological foundations of behavior, learning, information processing, stress and health, social interaction, development, motivation, emotion, and psychological disorders.

HLTH 102

HEALTH PRE-ADMISSION PREP COURSE

This course prepares students interested in health careers to achieve the most competitive application for admission as is possible by the individual student. Students participate in educational sessions that prepare them for standardized pre-entrance exams

required for matriculation into health care programs including Radiologic Technology, Associate Degree in Nursing, and Practical Nursing programs at Community College of Beaver County and other institutions of higher learning. This course provides a general overview of topics covered on the standardized exams and basic test-taking strategies. Students learn how to navigate the college system to complete the admission process and prepare for exams by analyzing questions.

SPRING SEMSTER

PSYC106

HUMAN GROWTH & DEVELOPMENT

This course is a survey of human development from conception to senescence. Attention will be given to the physical, motor, emotional, personality, and social growth of the individual in infancy, childhood, adolescence, adulthood, and senescence.

LITR210

CONCEPTS OF LITERATURE

The course introduces students to the three major forms of literary expression: fiction, poetry, and drama. Significant works from each form will be analyzed to reveal creative techniques, how they represent an author's time, and how they reflect today's human condition.

HLTH 103

PORTFOLIO CAPSTONE PROJECT - HEALTH ACADEMY CAPSTONE COURSE

This course provides an opportunity for Health Academy students to complete a self-analysis of career interests and highlight personal achievements in the program. Students will research a health career of personal interest and develop a plan to achieve completion of a degree or certification in a chosen health care field. The course will culminate with completion of a portfolio demonstrating achievement of program outcomes and highlighting the student's overall collegiate experience.

SUMMER (optional) *Contact Health Academy Director @ healthchampion@ccbc.edu for further information

BIOL215

MICROBIOLOGY

Microscopic forms of life are considered with emphasis on bacteriology as it applies to numerous areas in industry, health, and sanitation. Laboratory activities consist of staining and culturing techniques as are used in identification of various organisms and analysis of water, food, and dairy products. The microscope will be used for observation of microbes.

CCBC CRIMINAL JUSTICE ACADEMY

Ambridge Area High School is proud to be associated with the CCBC Criminal Justice Academy. We offer dual enrollment for students interested in criminal justice careers who also meet the program requirements, as specified by CCBC. Students in grades 11-12 are eligible for this program. As a CCBC criminal justice student, you'll have the opportunity to earn up to 28 college credits while still taking your high school classes. Additionally, monetary fees are determined by CCBC. Additional information of this program can be found in the Guidance Office or by contacting the Criminal Justice Academy at Mark Joyce 724-480-3628 or via e-mail CJChampion@ccbc.edu.

FALL SEMESTER

CRIM 100

INTRODUCTION TO CRIMINAL JUSTICE

This course is an overview of the American criminal justice system dealing with the role of the police, courts, and correctional institutions. The course also covers constitutional limits of police power, the trial process and sentencing structure, and the functions of the numerous agencies within the criminal justice system.

WRIT 101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College writing if required, permission of the Division Director. Honors Option Available English Composition Honor students will practice expository and persuasive discourse in writing and learning the academic form of the essay and research paper. Students will focus on the development of a sound thesis for projects concerning topics of global or international significance.

COLL 100

TITAN TRANSITION

This course emphasizes the growth of the individual both academically and personally. Students become part of the learning community at CCBC through an orientation to campus technology and services and by acquiring knowledge of the culture of higher education.

SPRING SEMESTER

CRIM 210

JUVENILE JUSTICE

The course topics include biological, psychological and sociological factors in juvenile delinquency; a survey of theories of juvenile delinquency; and modern trends in prevention and treatment.

CRIM 201

INTERVIEW INTERROGATION PART 1

This course will review fundamentals of the interviewing process including interviewing aides, recognition and use of psychological factors in perception and identification of deception, and physical influence factors of perception and identification of deception.

COMM 201

PUBLIC SPEAKING

The emphasis is on speech preparation and delivery in a variety of speaking experiences designed to improve the speaker's capability through the application of correct speech practices. Honors Option Available Public Speaking Honors emphasizes speech preparation, and delivery, with special attention paid to crafting effective academic and professional presentations on global and international issues. Speaking experiences and presentations will be designed by individuals and groups and presented to the CCBC community, the public and other appropriate audiences.

FALL SEMESTER

CRIM 124

POLICING/LAW ENFORCEMENT

An introduction to the police system in America, the gateway to the criminal justice process. Topics covered will include the historical foundations of police, both in America and abroad, the various roles and tasks of law enforcement and the process by which police officers are hired. The police subculture, the stresses of modern day police work along with innovative changes taking place in law enforcement will be explored.

CRIM 202

INTERVIEW INTERROGATION PART 2

This course will introduce the fundamentals of the eight steps of the interviewing process as well as the legal constraints in witness victim identification in the use of line-ups, show-ups and photographic displays.

PSYC101

GENERAL PSYCHOLOGY

This course examines the scientific study of behavior and mental processes and provides a survey of the major areas of psychology. Important topics and findings from psychology are reviewed. Topics include the role of science in the study of behavior, the biological foundations of behavior, learning, information processing, stress and health, social interaction, development, motivation, emotion and psychological disorders.

SPRING SEMESTER

CRIM 125

CORRECTIONS

Organization, objectives, and functions of a correctional agency will be studied. Principles of Administration relating to the sound and efficient operation of correctional facilities will be discussed with emphasis on the special problems encountered in the field.

CRIM 203

INTERVIEW INTERROGATION PART 3

Techniques of the interrogation process will be covered with particular emphasis on role -playing. Major Supreme Court decisions on interrogation law will also be discussed.

LITR 210

CONCEPTS OF LITERATURE

This course introduces students to the three major forms of literary expression: fiction, poetry, and drama. Significant works from each form will be analyzed to reveal creative techniques, how they represent an author's time, and how they reflect today's human condition. Honors Option Available Concepts of Literature Honors explores literary art forms, both traditional, fiction, poetry and drama and non-traditional, film, virtual reality and gaming as well as the international cultures and philosophical approaches that create and interpret such works. Significant contributions to each literary form will be analyzed, resulting in student produced compositions, multi-media presentations and student lead discussions.

Prerequisite: WRIT101 or permission of the department.

CCBC STEM ACADEMY

Ambridge Area High School is proud to be associated with the CCBC STEM ACADEMY. We offer dual enrollment for students interested in STEM ACADEMY careers who also meet the program requirements, as specified by CCBC. Students in grades 11-12 are eligible for this program. Students will gain hands-on experience in the CCBC's classrooms and labs. As a CCBC STEM Academy student you will have the opportunity to earn up to 28 college credits while completing your high school degree VIA STEM Academy Engineering or STEM Academy Process Technology. Additionally, monetary fees are determined by CCBC. Additional information of this program can be found in the Guidance Office or by contacting the STEM Academy director Jodi Carver at 724-480-3628 or via e-mail STEMChampion@ccbc.edu.

Classes completed while in one of the below STEM Academy Tracks: **Engineering, Coding or Technology**. Please see the listed classes and tracks at the end of the STEM Academy Course Descriptions:

ENGR 130

ROBOTICS

This course is designed around the fundamental understanding of the mechanical, logical and programming systems that make up robots and the development of workplace competencies. The cornerstone of the class involves solving engineering design problems. Students assume the role of project manager/problem solver as they build, program and debug agile robots in remote control and autonomous modes. Arduino microprocessors are used to develop independent embedded system devices.

MATH 160

CALCULUS I

This course provides an introduction to the ideas and applications of calculus. The major topics studied are limits and continuity; differentiation; applications of differentiation; and integration. Prerequisite: "C" or better in MATH140 or MATH155, appropriate placement score, appropriate high school records or permission of the faculty.

ENGR 120

CAD: COMPUTER AIDED DRAFTING

The Computer Aided Design (CAD) course provides a solid foundation that focuses on basic computer aided drafting skills using the latest release of AUTOCAD. Students begin their study with 2-dimensional drawing concepts, continue working with complex entities and finally work on 3-dimensional modeling techniques. Students survey industries that commonly use AUTOCAD along with industry-standard, concepts and techniques.

MATH 161

CALCULUS II

This course is a continuation of MATH160 and completes the introduction to one-variable calculus. Major topics covered are applications of integrals; inverse functions; techniques of integration; and infinite series. Prerequisite: "C" or better in MATH160.

PSYCH 101

GENERAL PSYCHOLOGY

This course examines the scientific study of behavior and mental processes and provides a survey of the major areas of psychology. Important topics and findings from psychology are reviewed. Topics include the role of science in the study of behavior, the biological foundations of behavior, learning, information processing, stress and health, social interaction, development, motivation, emotion and psychological disorders.

PTEC 100

INTROUDCTION TO PROCESS TECHNOLOGY

This course is an overview of the equipment and operations in a variety of process industries. It introduces students to equipment, instrumentation, safety, quality, applications of chemistry and physics, and the roles of a process technician.

WRIT 101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College Writing if required, permission of the Division Director. Honors Option Available English Composition Honor students will practice expository and persuasive discourse in writing and learning the academic form of the essay and research paper. Students will focus on the development of a sound thesis for projects concerning topics of global or international significance.

COLL 100

TITAN TRANSITION

This course emphasizes the growth of the individual both academically and personally. Students become part of the learning community at CCBC through an orientation to campus technology and services and by acquiring knowledge of the culture of higher education.

PTEC 104

PROCESS TECHNOLOGY EQUIPMENT

This course is an introduction to the typical equipment used in the chemical process industry. It introduces terminology, an overview of the structural components and functions, and operation of equipment and vessels in the process industry. This course also introduces the process technician to his or her role in safe operation and maintenance of equipment.

PTEC 106

INSTRUMENTATION I

This course is an introduction to the main instruments of measurement and control used in the process industry. The course describes typical process variables and the instruments used to sense, measure, transmit and control these variables. This course also discusses the concept of control loops and the fundamentals of control loops such as controllers, regulators and final control elements. This course also provides the student with an introduction to instrumentation diagrams and basics of troubleshooting instrumentation.

COMM 201

PUBLIC SPEAKING

The emphasis is on speech preparation and delivery in a variety of speaking experiences designed to improve the speaker's capability through the application of correct speech practices. Honors Option Available Public Speaking Honors emphasizes speech preparation, and delivery, with special attention paid to crafting effective academic and professional presentations on global and international issues. Speaking experiences and presentations will be designed by individuals and groups and presented to the CCBC community, the public and other appropriate audiences.

PTEC 206

INSTRUMENTATION II

This course builds upon the concepts of measurement and controls covered in Instrumentation I and gives the student an introduction to switches, relays, annunciator systems and elements of signal conversion and transmission. The course also provides an overview of controllers and control schemes such as digital control, programmable logic control and distributed control systems. The concepts covered in this course provide the student with the basics of troubleshooting process control systems. 3-2-4
Prerequisites: PTEC100 and PTEC106

COMM 201

PUBLIC SPEAKING

The emphasis is on speech preparation and delivery in a variety of speaking experiences designed to improve the speaker's capability through the application of correct speech practices. Honors Option Available Public Speaking Honors emphasizes speech preparation, and delivery, with special attention paid to crafting effective academic and professional presentations on global and international issues. Speaking experiences and presentations will be designed by individuals and groups and presented to the CCBC community, the public and other appropriate audiences.

PTEC 206

INSTRUMENTATION II

This course builds upon the concepts of measurement and controls covered in Instrumentation I and gives the student an introduction to switches, relays, annunciator systems and elements of signal conversion and transmission. The course also provides an overview of controllers and control schemes such as digital control, programmable logic control and distributed control systems. The concepts covered in this course provide the student with the basics of troubleshooting process control systems. 3-2-4

Prerequisites: PTEC100 and PTEC106

CHEM 101

GENERAL CHEMISTRY I

This course involves an understanding of the principles of measurement, chemical equations, stoichiometry, atomic structure, chemical bonding, periodic relationships, and the chemistry of the common elements. Prerequisites: Appropriate placement score or 1 year high school chemistry with the appropriate letter grade or Pre-Req: MATH129 or MATH130.

ENGR 160

ENGINEERING FUNDAMENTALS

Engineering Fundamentals provides a baseline of engineering and mathematical laws and principles applicable to the engineering profession. The course explores how engineers apply analytical practices and problem solving skills to design, test, fabricate, and maintain engineered products and services that people use every day. Engineering analysis, experimentation, and design are applied to real problems from initial concept to final specifications. Individual and team projects are utilized to reinforce the skills engineers need to successfully implement engineering practices. Project results are evaluated in terms of technical and economic feasibility and social significance. 3-0-3 Prerequisites: MATH 130 or MATH 155

LITR210

CONCEPTS OF LITERATURE

This course introduces students to the three major forms of literary expression: fiction, poetry, and drama. Significant works from each form will be analyzed to reveal creative techniques, how they represent an author's time, and how they reflect today's human condition. Honors Option Available Concepts of Literature Honors explores literary art forms, both traditional, fiction, poetry and drama and non-traditional, film, virtual reality and gaming as well as the international cultures and philosophical approaches that create and interpret such works. Significant contributions to each literary form will be analyzed, resulting in student produced compositions, multi-media presentations and student lead discussions. Prerequisite: WRIT101 or permission of the department.

CISW 205

C# PROGRAMMING

Programming in C# introduces object-oriented programming (OOP) within Visual Studio.NET. Students learn syntax, programming, debugging, testing, data connections and employment while creating interactive applications. Structural programming techniques including variable creation, decisions structures and looping structures are introduced and OOP techniques such as: programming with classes and methods are reinforced throughout the course. Advanced topics including exception handling, inheritance, file input/output and interfaces are studied within the .NET integrated development environment (IDE).

DATA 100

SURVEY OF INFORMATION SCIENCE

Survey of Information Science is a course that serves as an introduction to the synergy between business concepts, information technology and data management. Relational and distributed database systems are used to learn how to use data to support corporate operations. Students are introduced to MIS concepts by studying industry standard systems in a variety of professional fields and regulatory environments. Business ethics and privacy law are explored using case studies

CISW 211

DATABASE FOUNDATIONS

Database Principles and Applications is a project-based course intended to teach students how to create, implement and maintain complex database systems. A variety of industry standard DBMS software applications are used to learn to model, design, create and maintain a relational database in a business environment. Students learn relational database schemas, SQL, functions, stored procedures, transaction management and database connectivity. Data analytics techniques are used to best meet the information needs

of modern decision makers. An overview of advanced distributed database systems is introduced including Data Warehousing, Data Mining, GIS, OLAP, Big Data, Business Performance Management (BPM) and others

CISW 101

CLIENT SIDE SCRIPTING LANGUAGES

Client-Side Scripting Languages teaches students to develop interactive websites using client-side programming techniques. Websites are developed using current industry-languages including Hypertext Markup Language (HTML5), Cascading Style Sheets (CSS3) and JavaScript (JS). Management skills are sharpened as students complete projects that begin with the design process and continue through coding, testing, debugging, deployment and maintenance of websites

CISW 206

SEVER-SIDE PROGRAMMING LANGUAGE

Server-side Programming Languages expands the development and management of websites by building on client-side programming and introducing server-side programming languages. The course begins with a review of client-side scripting. Next, students learn essential server-side development including PHP, Data-driven web programming, error handling and site management. Specialized topics such as frameworks, security, web services and social networks are reviewed. Projects are developed throughout the course to offer hands-on programming experiences. 3-0-3 Prerequisite: CISW101

CISW 212 & CISW 212

SQL FOUNDATIONS / ADVANCED SQL & REPORTING

Speak to the director of the class for curriculum. The SQL Series will help you gain a full understanding of this universal programming language. You'll start by learning key concepts and move on to more advanced topics as you progress through the lessons. By the end of the series, you'll have a solid working knowledge of SQL.

Start with the key concepts of SQL as you learn about the basic structure of relational databases and how to write simple and complex SQL statements. You'll learn to write queries to create tables; retrieve data from single or multiple tables; delete, insert, and update data in a database; gather significant statistics from data stored in a database; and more. Your new skills with databases will enhance your competitiveness in the technical fields of software development and database administration.

Series bundles are not eligible for partial drops or refunds. Transfers to other open sessions of the same course are available. Please refer to your school for additional details regarding drops, transfers, and refunds on Series bundles.

Series bundles are not eligible for partial drops or refunds. Transfers to other open sessions of the same course are available. Please refer to your school for additional details regarding drops, transfers, and refunds on Series bundle

ACADEMIC CURRICULUM: STEM ACADEMY – Engineering / Coding / Process Technology

STEM ACADEMY: ENGINEERING

FIRST SEMESTER: 7 CREDITS

CODE	CLASS
ENGR130	ROBOTICS
WRIT101	ENGLISH COMPOSITION
COLL100	TITAN TRANSITION

SECOND SEMESTER: 7 CREDITS

ENGR120	CAD: COMPUTER AIDED DRAFTING
CHEM101	GENERAL CHEMISTRY

THIRD SEMESTER: 7 CREDITS

CODE	CLASS
ENGR160	ENGINEERING FUNDAMENTALS
MATH160	CALCULUS I

FOURTH SEMESTER: 7 CREDITS

MATH161	CALCULUS II
LITR210	CONCEPTS OF LITERATURE

STEM ACADEMY: CODING

FIRST SEMESTER: 7 CREDITS

CODE	CLASS
CISW205	C# PROGRAMMING
WRIT101	ENGLISH COMPOSITION
COLL100	TITAN TRANSITION

SECOND SEMESTER: 7 CREDITS

DATA100	SURVEY OF INFORMATION SCIENCE
CISW211*	DATABASE FOUNDATIONS
COMM201	PUBLIC SPEAKING

*Courses will run only based on enrollment numbers

THIRD SEMESTER: 7 CREDITS

CISW101	CLIENT SIDE SCRIPTING LANGUAGES
CISW212*	SQL FOUNDATIONS
PSYC101	GENERAL PSYCHOLOGY

FOURTH SEMESTER: 7 CREDITS

CISW206	SERVER-SIDE PROGRAMMING LANGUAGE
CISW213*	ADVANCED SQL & REPORTING
LITR210	CONCEPTS OF LITERATURE

STEM ACADEMY: PROCESS TECHNOLOGY

FIRST SEMESTER: 7 CREDITS

CODE	CLASS
PTEC100	INTRO PROCESS TECHNOLOGY
WRIT101	ENGLISH COMPOSITION
COLL100	TITAN TRANSITION

SECOND SEMESTER: 7 CREDITS

PTEC104	PROCESS TECHNOLOGY
COMM201	EQUIPMENT PUBLIC SPEAKING

THIRD SEMESTER: 7 CREDITS

CODE	CLASS
PTEC106	INSTRUMENTATION I
PSYC101	GENERAL PSYCHOLOGY

FOURTH SEMESTER: 7 CREDITS

PTEC206	INSTRUMENTATION II
LITR210	CONCEPTS OF LITERATURE

CCBC EDUCATION ACADEMY: PRE-K – 4TH OR SECONDARY

Do you want to inspire learning? Do you desire to empower lives through a career in teaching? Enroll in the Education Academy to become a future educator. Through the Academy, high school students in grades 11 and 12 at participating school districts have the opportunity to gain hands-on experience in diverse educational settings and learn how to prepare developmentally appropriate lessons and learning environments. As an Education Academy student, you will have the opportunity to earn up to 28 college credits while still working towards your high school diploma.

PRE-K – 4TH GRADE PROGRAM:

FALL SEMESTER:

COLL 100

TITAN TRANSITION

This course emphasizes the growth of the individual both academically and personally. Students become part of the learning community at CCBC through an orientation to campus technology and services and by acquiring knowledge of the culture of higher education.

WRIT 101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College Writing if required, permission of the Division Director. Honors Option Available English Composition Honor students will practice expository and persuasive discourse in writing and learning the academic form of the essay and research paper. Students will focus on the development of a sound thesis for projects concerning topics of global or international significance.

ERCH 100

INTRO TO EARLY CHILDHOOD

This course introduces students to early childhood education – the basic knowledge and skills, the attitudes, and the philosophies. Students also examine early childhood education in light of its history, pioneers, curriculum, programs, and new trends. Students learn basic child development theories and milestones from birth through age eight. Introduction to assessment, observation, inclusion environments that are universally designed, ethical guidelines, professionalism, curriculum models, and partnerships with families are incorporated as foundational skills. Observation visits to early childhood settings are required.

SPRING SEMESTER:

PSYC 101

GENERAL PSYCHOLOGY

This course examines the scientific study of behavior and mental processes and provides a survey of the major areas of psychology. Important topics and findings from psychology are reviewed. Topics include the role of science in the study of behavior, the biological foundations of behavior, learning, information processing, stress and health, social interaction, development, motivation, emotion and psychological disorders.

EDUC 230

INTRO SPECIAL ED

Students are introduced to a wide range of subject matter, from the history of special education to challenges facing special education. Students will apply research to create active classroom strategies that illustrate an awareness of the concerns of special education. Prerequisite: EDUC108, EDUC105, or ERCH10

EDUC 221

ENGLISH LANGUAGE LEARNERS I

Course Catalog Description. As the number of English Language Learners (ELLs) continues to grow in our public schools there is an increased need for highly qualified teachers to instruct them. This course will be an introduction into the varied theories and practices

of teaching English Language Learners. This course will look at some prominent research in the field of second language acquisition and apply it to strategies and best practices used in Pennsylvania, as well as other parts of the country. This course will give students an overview to support effective instruction of students who have a first language other than English. Prerequisite: EDUC108, ERCH100, EDUC105.

FALL SEMESTER:

COMM 201

PUBLIC SPEAKING

The emphasis is on speech preparation and delivery in a variety of speaking experiences designed to improve the speaker's capability through the application of correct speech practices. Honors Option Available Public Speaking Honors emphasizes speech preparation, and delivery, with special attention paid to crafting effective academic and professional presentations on global and international issues. Speaking experiences and presentations will be designed by individuals and groups and presented to the CCBC community, the public and other appropriate audiences.

ERCH 105

CHILD DEVELOPMENT/HEALTH/SAFETY

This course studies the physical development of young children with respect to nutritional needs, safety considerations, general health requirements, and appropriate classroom experiences to enhance that development. Topics concerning educating children with special needs (educational adaptations) are included.

EDUC 222

ENGLISH LANGUAGE LEARNERS II

PLEASE SPEAK WITH PROFESSOR

SPRING SEMESTER:

LITR210

CONCEPTS OF LITERATURE

This course introduces students to the three major forms of literary expression: fiction, poetry, and drama. Significant works from each form will be analyzed to reveal creative techniques, how they represent an author's time, and how they reflect today's human condition. Honors Option Available Concepts of Literature Honors explores literary art forms, both traditional, fiction, poetry and drama and non-traditional, film, virtual reality and gaming as well as the international cultures and philosophical approaches that create and interpret such works. Significant contributions to each literary form will be analyzed, resulting in student produced compositions, multi-media presentations and student lead discussions. Prerequisite: WRIT101 or permission of the department.

ERCH 200

DIVERSITY & INCLUSION

This course focuses on the history, principles, and instructional practices of multicultural education. Topics include the power of culture, culturally relevant teaching, race, equality, social oppression, human diversity including sexual orientation and gender identity, social biases, prejudice and bullying and diversity and the achievement gap. Emphasis is placed on why multicultural education is important in education and success as a teacher.

EDUC 223

ENGLISH LANGUAGE LEARNERS III

PLEASE SPEAK WITH PROFESSOR

CCBC EDUCATION ACADEMY: SECONDARY EDUCATION PROGRAM

FALL SEMESTER

COLL 100

TITAN TRANSITION

This course emphasizes the growth of the individual both academically and personally. Students become part of the learning community at CCBC through an orientation to campus technology and services and by acquiring knowledge of the culture of higher education.

WRIT 101

ENGLISH COMPOSITION

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College Writing if required, permission of the Division Director. Honors Option Available English Composition Honor students will practice expository and persuasive discourse in writing and learning the academic form of the essay and research paper. Students will focus on the development of a sound thesis for projects concerning topics of global or international significance.

EDUC 105

FOUNDATIONS OF EDUCATION

This course is a study of the historic and philosophical antecedents of the American school system and its growth, development, and potential.

SPRING SEMESTER

PSYCH 106

HUMAN GROWTH/DEVELOPMENT

This course is a survey of human development from conception to senescence. Attention will be given to the physical, motor, emotional, personality, and social growth of the individual in infancy, childhood, adolescence, adulthood, and senescence.

EDUC 230

INTRO SPECIAL ED

Students are introduced to a wide range of subject matter, from the history of special education to challenges facing special education. Students will apply research to create active classroom strategies that illustrate an awareness of the concerns of special education. Prerequisite: EDUC108, EDUC105, or ERCH10

EDUC 221

ENGLISH LANGUAGE LEARNERS I

As the number of English Language Learners (ELLs) continues to grow in our public schools there is an increased need for highly qualified teachers to instruct them. This course will be an introduction into the varied theories and practices of teaching English Language Learners. This course will look at some prominent research in the field of second language acquisition and apply it to strategies and best practices used in Pennsylvania, as well as other parts of the country. This course will give students an overview to support effective instruction of students who have a first language other than English. Prerequisite: EDUC108, ERCH100, EDUC105

FALL SEMESTER

COMM 201

PUBLIC SPEAKING

The emphasis is on speech preparation and delivery in a variety of speaking experiences designed to improve the speaker's capability through the application of correct speech practices. Honors Option Available Public Speaking Honors emphasizes speech preparation, and delivery, with special attention paid to crafting effective academic and professional presentations on global and international issues. Speaking experiences and presentations will be designed by individuals and groups and presented to the CCBC community, the public and other appropriate audiences.

LTR/HIST
ELECTIVE

EDUC 222

ENGLISH LANGUAGE LEARNERS II

PLEASE SPEAK WITH PROFESSOR: As the number of English Language Learners (ELLs) continues to grow in our public schools there is an increased need for highly qualified teachers to instruct them. Level II Class.

SPRING SEMESTER

LITR210

CONCEPTS OF LITERATURE

This course introduces students to the three major forms of literary expression: fiction, poetry, and drama. Significant works from each form will be analyzed to reveal creative techniques, how they represent an author's time, and how they reflect today's human condition. Honors Option Available Concepts of Literature Honors explores literary art forms, both traditional, fiction, poetry and drama and non-traditional, film, virtual reality and gaming as well as the international cultures and philosophical approaches that create and interpret such works. Significant contributions to each literary form will be analyzed, resulting in student produced compositions, multi-media presentations and student lead discussions. Prerequisite: WRIT101 or permission of the department.

EDUC 200

DIVERSITY & INCLUSION

This course focuses on the history, principles, and instructional practices of multicultural education. Topics include the power of culture, culturally relevant teaching, race, equality, social oppression, human diversity including sexual orientation and gender identity, social biases, prejudice and bullying and diversity and the achievement gap. Emphasis is placed on why multicultural education is important in education and success as a teacher.

EDUC 223

ENGLISH LANGUAGE LEARNERS III

PLEASE SPEAK WITH PROFESSOR: As the number of English Language Learners (ELLs) continues to grow in our public schools there is an increased need for highly qualified teachers to instruct them. Level III Class.

CCBC MASCARO CONSTRUCTION ACADEMY

You'll learn technical skills that can then be applied to the planning, design, and construction of a project, from beginning to end. You'll gain hands-on experience in our classrooms and construction learning labs, along with being taught in real-world settings. As a CCBC MASCARO Construction Academy student, you'll have the opportunity to earn up to 28 college credits while still taking your high school classes. For more information, contact: Chris Leininger, Construction Champion: constructionchampion@ccbc.edu or at 724-480-3543

FALL SEMESTER:

CNST 100

INTRO TO THE CONSTRUCTION INDUSTRY

This course will provide an overview of the construction industry by examining the history of construction, an overview of the crafts and trades, construction documents, safe use of hand and power tools, technology, and the phases of construction.

CNST150

CONSTRUCTION MEASURING, SURVEYING AND LAYOUT

This course will introduce students to the methods and techniques used in performing measurements for the collection of data and for construction layout. The course will cover items such as English and metric (SI) measurement systems, precision and accuracy, differential leveling, and building stakeout. Students will get hands-on experience using various types of measuring tools including tapes, calipers, square, levels, transits, and construction line. Additionally, students will be introduced to new measurement technology such as photogrammetry, LIDAR scanning and GPS.

COLL100

TITAN TRANSITION

This course emphasizes the growth of the individual both academically and personally. Students become part of the learning community at CCBC through an orientation to campus technology and services and by acquiring knowledge of the culture of higher education.

SPRING SEMESTER:

CNST 130

CONSTRUCTION DRAWINGS AND SPECIFICATIONS

This course is an introduction on reading and interpreting construction drawings and specifications as related to a construction project. Students will review and be able to understand construction documents related to residential and commercial construction projects. Students will gain an understanding of the interrelation of various drawings, and how to interpret documents to ensure a project is completed to accepted standards. The course will also introduce students to computer applications used in the industry to create such drawings.

CNST120

CONSTRUCTION SAFETY, QUALITY, AND PRODUCTION

This course introduces students to OSHA regulations and industry practices related to creating and maintaining safe construction sites and safety cultures within an organization. Students will also learn the importance of quality management on a construction site. By the end of the course, students will have a firm understanding regarding the importance of quality, safety, and production as they relate to a company's reputation, sustainment, and longevity. The OSHA 10-hr Construction certification will be taught during this course and student will be eligible to sit for the certification exam

FALL SEMESTER:

MATH 129

COLLEGE ALGEBRA WITH REVIEW

The functional approach to algebra is stressed with attention to the properties of the real number system; linear functions and equations; exponents; radicals; functions; systems of equations; and quadratic equations. Fundamental algebra concepts are reviewed and strengthened through assignments on MyMathLab. Additional topics may be added at the discretion of the instructor. Prerequisite: Appropriate placement score or appropriate high school records

CNST 230

CONSTRUCTION INDUSTRY ESTIMATING

This course is designed to provide a strong understanding of construction estimating techniques. Students will learn the methodology, procedures, and organizational techniques involved in the quantity takeoff, pricing of contractor work, and preparation of a competitive bid. Construction documents for both residential and commercial projects will be used to develop detailed estimates by trade and for an entire project. Students will also be introduced to software applications used in estimating. 3-0-3 Pre-Requisite - CNST130

SPRING SEMESTER:

CNST 210

CONSTRUCTION METHADODOLOGY

This course will promote a student's understanding of building systems, materials, and methods. Students will study the origins and uses of various construction materials including stone, brick, concrete, wood, aluminum, and steel. Additional topics explored will be site work and preparation, foundations, and floor and wall framing systems. Through an experiential learning component of the course, students will conduct mock site preparation through a one-call, and then build a wood floor and framing system to support roofing and exterior finishing.

WRIT 101

ENGLISH COMPOSTION 101

Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. Pre-requisite: Placement testing; successful completion of DEVS012 Reading and DEVS015 Introduction to College Writing if required, permission of the Division Director. Honors Option Available English Composition Honor students will practice expository and persuasive discourse in writing and learning the academic form of the essay and research paper. Students will focus on the development of a sound thesis for projects concerning topics of global or international significance.

CCAC APPRENTICESHIP PROGRAM

German American Chamber of Commerce Pre-Apprenticeship

Weeks: 36
Grades: 11,
12* Credit:
1.0

Pre-Apprenticeship services and programs are designed to prepare students to enter and succeed in registered Apprenticeship programs. In other words: they are **paid, college-credited internships** that give High School students in their senior year the opportunity to explore and learn about exciting career paths. The execution of the Pre-Apprenticeship is twofold as per below.

***Pre-requisite:** Student Must Speak with Member of the School Counseling office and transition coordinator. Student will receive the apprenticeship program by teacher recommendation only.

1. Dual Enrollment (College in the classroom) and certification

Through dual enrollment agreements, students will be trained skills that are relevant for the manufacturing industry as well as prepare them to pass the MT1 certification (Manufacturing Technician Level 1 from the MSI Institute). The certification is on the one hand **recognized in the industry nationwide** and on the other hand bound with **6 college credits from CCAC** that can later on be transferred (e.g. into the Apprenticeship Program).

2. Paid internship at a company

When senior students decide to participate in our Pre-Apprenticeship program they get paired with a company, where they will be **job shadowing at state-of-the-art facilities** and get familiar with careers in technical or manufacturing fields. The paid internship will be integrated into the student's school schedule and will make the preparations for the MT1 certification more relevant and hands- on.

ART DEPARTMENT

The Art Department offers a wide variety of electives to the student body. Students are given numerous opportunities to develop their skills and talents to learn how to access their creativity. Upper-level courses prepare students for an artistic career post-graduation. Students will begin to understand how art affects their community and world cultures through various community art projects and art history lessons.

0115

ART I – BEGINNING STUDIO

ART Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

This course was designed as a rigorous introduction to visual arts for the student interested in art. Many forms of art will be explored. Students will have an opportunity to enrich their understanding of drawing, painting, ceramics, sculpture, and crafts.

Prerequisite: None

0120

ART II – INTERMEDIATE STUDIO

ART Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

This course offers an advanced approach to drawing, painting, sculpture, and crafts. Students will be able to create works using their unique subject matter while remaining in the scope of the art concepts being presented.

Prerequisite: PASSING GRADE AND teacher approval from Art I.

0125

ART III—ADVANCED STUDIO

ART Weeks: 18

Grades: 10, 11, and 12

Credit: 0.5

This course places emphasis on further developing individual art skills. Students will have more freedom to use their creativity and work independently in a variety of art media. The focus will be on beginning to build a portfolio of work. These students also will play a role in creating and assisting with Art Shows.

Prerequisite: PASSING GRADE and teacher approval from Art II.

0130

ART IV

Weeks: 18

Grade: 10, 11, and 12

Credit: 0.5

This course provides students an opportunity for further artistic development in creating original works of art. Students will research and provide documentation for a specific area of art they wish to pursue, such as painting, sculpture, etc. The focus will be on finalizing a portfolio of work. These students also will play a role in creating and assisting with Art Shows.

Prerequisite: PASSING GRADE and teacher approval from Art III.

0170
ART V INDEPENDENT STUDY
Weeks: 18
Grades: 11, and 12
Credit: 0.5

This course is designed for the serious art student who would like to develop skills beyond Art IV. Students will further strengthen and develop their portfolio in their preferred medium. Artistic career options will be explored and researched during the course.
Prerequisite: PASSING GRADE and teacher approval from Art IV.

0135
DRAWING I
Weeks: 18
Grades: 10, 11, and 12
Credit: 0.5

This course will implement basic drawing techniques. Media such as pencil, charcoal, pastels, markers, and pen and ink will be explored. Emphasis will be on correct value, perspective, and spatial awareness.
Prerequisite: PASSING GRADE in Art I.

0140
DRAWING II
Weeks: 18
Grades: 10, 11, and 12
Credit: 0.5

This course will build upon skills and techniques learned in Drawing I. Advanced techniques will be taught and emphasis will be on creating pieces to build a drawing portfolio.
Prerequisite: PASSING GRADE and Teacher Approval from Drawing I.

0150
JEWELRY MAKING
Weeks: 18
Grades: 10, 11, and 12
Credit: 0.5

This course is designed to provide students with the opportunity to create functional jewelry, wearable arts and decorative items through the implementation of many different techniques and processes. Basic jewelry methods and tools will be introduced. Prerequisite: PASSING GRADE and teacher approval from Art I.

0155
CERAMICS/SCULPTURE
Weeks: 18
Grades: 11 and 12
Credit: 0.5

Students will learn to create three dimensional sculpture through ceramics and a variety of other medium. During the course of the semester the students will gain knowledge of basic ceramic hand-building processes, and various sculptural methods.
Prerequisite: PASSING GRADE and teacher approval from Art I.

0160
PAINTING
Weeks: 18
Grades: 11 and 12
Credit: 0.5

Students will explore multiple paint mediums and techniques. This course will teach students to use the proper surface for each unique medium as well as how to properly stretch a canvas. Students who intend to further their career in the arts will benefit from.
Prerequisite: PASSING GRADE and teacher approval from Art I.

BUSINESS / COMPUTERS / MARKETING

Through the careful selection of courses, the Business Program can be combined with the Academic Program and still allow the student to meet college entrance requirements. This combination is highly recommended for students who may be interested in going into business management, accounting, marketing, business education, and any other related fields.

Since Business Administration is the second chosen field of study by college students, the Business Department offers an innovative, flexible, personalized, and comprehensive plan to achieve any academic, general, or vocational curriculum.

0200

BUSINESS AND PERSONAL FINANCE I

Weeks: 18

Grades: 9, 10

Credit: 0.5

This practical information course is designed to provide the student with the knowledge and skills needed for Business and Personal Finance opportunities in the future. The course is designed to encourage future applications of financial planning and concepts that would lead to the exploration of financial data and careers. Credit management, financial security, and business marketing information would be introduced for all students and exploration. Course content includes Careers in Business, Banking, Investments, Insurance, Credit, Taxes, and Financial Planning. Students can continue with Business and Personal Finance II for further exploration in the world of business and finance careers after completion of the course. The student will also be introduced to Personal Finance and the relationship between having a career and building a strong financial structure for future success.

Prerequisite: None

0201

BUSINESS AND PERSONAL FINANCE II

Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

Business and Personal Finance II course is designed to encourage the personal application of financial planning concepts and will include assignments that foster critical thinking skills and analyses of financial data. Students will be able to directly apply what they have learned to their lives in order to become successful financially. This course will educate the importance of financial security through diversified investments while understanding credit management to make sound life decisions.

Prerequisite: Business and Personal Finance I

????

INTERNATIONAL BUSINESS

Weeks: 18

Grades: 9,10,11,12

Credit: 0.5

International Business will provide an up-to-date and complete exploration of international business issues and practices. With a strong foundation of international business theory, this course will include current examples, case studies, and insights showing how global businesses apply these concepts and theories. Controversies in international business will be reflected upon as will the impact of international business practices on countries, corporations, and individuals. The course will examine the role and impact of culture and also includes the exploration into world maps, time zones, and currencies, helping students develop and refine a global perspective. This course adopts a truly global approach with attention given to topics that are critical to the international manager in the global business environment.

0210

SPORTS AND ENTERTAINMENT MANAGEMENT

Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

Play Ball! Let the show begin! If you would like to investigate the possibility of a career in the Sports and Entertainment field, then this is the class for you! Sports and Entertainment Management will offer the opportunity to learn the basics of the Sports and Entertainment Industry. The course will concentrate on Business, Management, Communication and Interpersonal Skills, Economics, Professional Development, Sports Strategies, Recruiting Athletes and Entertainers, Risk Management and Managing Information.

Prerequisite: None

0215
BUSINESS LAW (Criminal and Civil)
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

This course will give students an understanding of the Law as it pertains to them and the world. Course content includes Law and its legal procedure, rights and responsibilities as a citizen, consumer, and worker, contracts, starting a business, and planning for the future.
Prerequisite: None

0225
ACCOUNTING I
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

This course introduces the accounting principles and bookkeeping procedures to maintain a company's records. (Accounting cycle, Accounting systems, and internal control) Students should demonstrate an understanding of accounting principles and procedures and display a basic understanding of financial statements. Prerequisite: None

0230
ACCOUNTING II
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

Students will learn the principles of accounting theory and practice currently used in accounting information systems. Topics covered include accounting for service and merchandising business enterprises. The process of analyzing, journalizing, and posting are covered in-depth, as well as adjusting accounts, preparing financial statements, and completing the accounting cycle. Deferrals, accruals, accounting for merchandise inventory, ethics, and internal controls, cash and receivables are also covered.
Prerequisite: Teacher Recommendation

MARKETING AND COOPERATIVE EDUCATION

Over one-third of the jobs in the country deal with some aspect of marketing, Consider the possibilities!

The Marketing and Cooperative Education Program is an excellent way to start if a student is interested in pursuing management, accounting, retailing, selling, finance, marketing, international business, advertising, entrepreneurship, or public relations.

The Ambridge Marketing and Business Programs are involved with a secondary and post-secondary National Organization, DECA (An association of marketing and business students), which gives students an advantage in hiring, developing leadership skills, competition, community service, etiquette, SCHOLARSHIPS, and much more. Students are encouraged to participate in DECA.

The Marketing and Cooperative Education Program is a great opportunity for those who continue their education after high school graduation and those who go directly into the workforce.

The Marketing and Cooperative Program also gives the students the opportunity to apply their classroom experiences and knowledge to hands-on, real-life situations through a cooperative work experience.

0270
MARKETING I
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

The marketing program includes topics relating to the world of marketing or management such as marketing concepts, economic essentials, business, and social responsibilities, business plans, marketplace, fundamentals of mathematics, communication skills, computer technology, interpersonal and management skills, selling, and advertising. Students must maintain a 70% in Marketing I to take Marketing II. It is recommended to be taken as a sophomore or junior.
Prerequisite: None

0275
MARKETING II
Weeks: 36
Grades: 11, and 12
Credit: 1
This course is designed to develop advanced marketing competencies. Class includes promotion, distribution, pricing, marketing information management, product service management, target markets, buying costs, demand, entrepreneurship, finance, employability skills, and career development. Students must maintain a 70% in Marketing II to be released from school for on-the-job training. Only seniors are dismissed from school for OJT.
Prerequisite: Marketing I

0280
ON THE JOB TRAINING (OJT)
Weeks: 36
Grades: 12
Credit: 1
Released for four (4) periods—6, 7, 8, 9

0285
ON THE JOB TRAINING (OJT)
Weeks: 36
Grades: 12
Credit: 1
Released for three (3) periods—7, 8, 9

0290
ON THE JOB TRAINING (OJT)
Weeks: 36
Grades: 12
Credit: 1
Released for two (2) periods—8, 9

0295
ON THE JOB TRAINING (OJT)
Weeks: 36
Grades: 12
Credit: 1
Released for one (1) period—9

ENGLISH

Each student will select courses beginning in ninth grade to fulfill his or her communication requirements for graduation. In order to complete all English requirements, a student must complete one Communications / English course from the particular course sequence each year.

0345

ADVANCED PLACEMENT LITERATURE AND COMPOSITION

Weeks: 36

Grade: 12

Credit: 1

AP® courses in English consist of a full high school academic year of work and are comparable to courses in colleges and universities. This course is for students with superior reading and writing skills as well as an interest in a challenging, fast-paced environment. This course engages students in careful and critical analysis of literature, which benefits students by cultivating one's understanding of self, others, and society overall. The course includes an intensive study of various literary genres and periods, concentrating on works of recognized literary merit. Students will read deliberately and thoroughly, take time to understand a work's complexity, analytically critique texts, and engage in presentations. Writing is an integral part of the AP® English Literature and Composition course. A summer assignment is required. It is expected that students, who take the course, seek college credit. A minimum grade requirement of a "C" and a fee will apply to receive college credit. Students also have the choice to take the course for Advanced Placement® credit. Those not enrolling in the RMU CHS credit will be expected to take the Advanced Placement® exam. The AP® Literature and Composition Exam is offered in early May.

Prerequisite: An 80% in AP® Language or 90% in College Prep 11. Mandatory current English teacher recommendation.

Completion of summer assignment.

0340

COLLEGE PREPARATORY ENGLISH 12: THROUGH COOPERATION WITH CCBC

Weeks: 36

Grades: 12

Credit: 1

College Preparatory English 12 with College is offered for three college credits for a nominal fee. Students will take WRIT 101. This is the same class CCBC students take on campus. The class focuses on English Composition. Students will practice expository writing and learn the academic form of the essay and research paper. Students will focus on the development of an academically sound and challenging thesis and resulting essay. The mechanics of writing will be reviewed as needed. This course is one semester long. The second-semester students will follow the College Preparatory English curriculum. Submission of summer reading and writing requirements upon the first day of school.

Prerequisite: 80% in College Prep 11, 80% in AP® Language, or current English teacher recommendation

0335

PRACTICAL ENGLISH 12

Weeks: 36

Grade: 12

Credit: 1

Practical English 12 is designed for all twelfth-grade students not enrolled in College Prep 12 or AP® Lit. It is a practical and functional senior course, which focuses on five major components: writing, research, literature, grammar, and oral communications. Specific units will be covered in all literary genres; a novel, short story, and drama. Students refine their language skills by engaging in individual and group activities. Students read literature ranging from traditional and contemporary classics to newspaper and magazine articles. Students will continue to enhance their core communication skills. A research project is required. Additional emphasis will be placed on creative projects and presentations.

Prerequisite: None

0350
ADVANCED PLACEMENT® ENGLISH LANGUAGE AND COMPOSITION
Weeks: 36
Grades: 11
Credit: 1

AP® courses in English consist of a full high school academic year and are comparable to courses in colleges and universities. This college level course is for students with superior reading and writing skills as well as an interest in a challenging, fast-paced environment. This course cultivates the reading and writing skills that students need for college success and intellectually responsible civic engagement. This course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to differing audiences for varying purposes. The course cultivates the rhetorical understanding and use of written language by directing students' attention to writer/reader interactions through formal and informal genres. To support these goals, rhetoric and composition courses emphasize the reading and writing of analytic argumentative texts instead of, or in combination with, texts representing English-language literacy traditions. Additionally, students will have the option to take this course in conjunction with the University of Pittsburgh's CHS Argument course. A minimum grade requirement of a "C" and a fee will apply to receive college credit. Students also have the choice to take this course for Advanced Placement® credit. Those not enrolling in the Pitt CHS credit will be expected to take the Advanced Placement® exam. Writing is an integral part of the AP® English Language and Composition course. A summer assignment is required. It is expected that students, who took the course, seek college credit. The AP® Literature and Composition Exam is offered in early May.
Prerequisite: 80% in Advanced English 10 or 90% in College Prep 10. Mandatory current English teacher recommendation.
Completion of summer assignment.

0320
COLLEGE PREPARATORY ENGLISH 11
Weeks: 36
Grades: 11
Credit: 1

College Preparatory English 11 is designed for college bound students interested in enhancing their abilities in literary analysis. Emphasis will be placed on grammar, research composition, public speaking, and an analytical approach to literature. This course is a survey of American Literature, requiring students to read, interpret, and analyze poetry, essays, short stories, drama, and novels from colonial to contemporary literature. MLA style is reinforced through all research and writing assignments. A College and Career Research project is required. This course has a mandatory summer assignment.
Prerequisite: 80% in College Prep 10, 90% in Practical English 10, or current English Teacher recommendation.

0325
PRACTICAL ENGLISH 11
Weeks: 36
Grades: 11
Credit: 1

Practical English 11 is designed for students who are not planning on attending college after high school. The emphasis in the class is to improve reading, writing, speaking, and critical thinking skills by studying literature, grammar, and composition. Students read high-interest short stories and novels, which serve as models for a wide variety of writing assignments. Students will use a standard process to compose professional correspondence and a variety of writings. A research project is a requirement for this class. Prerequisite: None

0330
ADVANCED ENGLISH 10
Weeks: 36
Grades: 10
Credit: 1

Advanced English 10 is designed to prepare top students for success in AP® courses, on the SAT and ACT tests, and in all other high-level English courses. In this course, students undertake a comparative analysis of literature representing a variety of cultures, philosophies, and regional pieces. Throughout the course, students continue to develop their writing craft through rigorous practice in various modes supported by a series of writers' workshops. This course also includes emphasis on public speaking, grammar, research, writing, and poetry. Advanced English 10 is designed for students interested in a challenging and accelerated study of literature and writing who intend to advance to AP Language and AP Lit.
Prerequisite: 90% in College Prep 9 or Practical English 9 or 80% in Advanced English 9. Mandatory current English Teacher recommendation. Completion of summer assignment.

0310
COLLEGE PREPARATORY ENGLISH 10

Weeks: 36
Grades: 10

College Preparatory English 10 is designed for college-bound sophomores. Emphasis will be placed on grammar, composition, public speaking, and literature. Improving higher-order thinking through emphasis of classic and contemporary World literature, as well as selected novels, will be the focus for improving writing skills. A research paper is also required. Submission of summer reading and writing requirements upon the first day of school.

Prerequisite: 80% in College Prep 9, 90% in Practical English 9, or current English teacher recommendation

0315
PRACTICAL ENGLISH 10

Weeks: 36
Grade: 10
Credit: 1

Communications II is designed for students who are not planning on attending college after high school. The emphasis in the class will stress literature, writing, test-taking preparation, and oral communications. A research paper is a requirement for this class. The literature will include selections from the World Literature Anthology. Specific units will be covered in all genres: novels, short stories, and drama.

Prerequisite: None

0355
ADVANCED ENGLISH 9

Weeks: 36
Grade: 9
Credit: 1

In this advanced course, students read, analyze, and compose essays about challenging works of literature and apply rules of grammar and mechanics to their writing. In addition, students focus on supplementary vocabulary, which they integrate into their speaking, reading, and writing. Throughout the year, the students practice public speaking and group interaction skills.

Prerequisite: 90% in Advanced English 8 or English 8. Mandatory current English teacher recommendation. Completion of a summer assignment.

0300
COLLEGE PREPARATORY ENGLISH 9

Weeks: 36
Grade: 9
Credit: 1

College Preparatory English 9 is designed for freshmen who intend to go to college after high school. Emphasis will be placed on grammar, composition, public speaking, and literature. Improving higher-order thinking through an emphasis on classic and contemporary literature, as well as selected novels, will be the focus for improving writing skills. Submission of summer reading and writing requirements upon the first day of school. Prerequisite: 80% in Advanced English 8, English 8, or current English teacher recommendation.

0305
PRACTICAL ENGLISH 9

Weeks: 36
Grade: 9
Credit: 1

Practical English 9 is designed for students who are not planning on attending college after high school. The emphasis in the class will stress literature, writing, test-taking preparation, and oral communications. The literature will include a wide selection from varied sources. Specific units will be covered in all genres; novels, short stories, and drama.

Prerequisite: None

0675
SAT PREPARATION/VERBAL
Weeks: 18
Grade: 10, 11, and 12
Credit: 0.5

This nine-week section of a one-semester course is designed to help prepare students planning on taking the SAT test. The verbal section stresses problem-solving techniques in analogies, antonyms, sentence completion, and reading comprehension. It is accompanied by a nine-week section on math preparation. Students planning on taking the SAT test should take this course. A nominal fee of \$25 will be applied towards the purchase of individual classroom materials. These materials will be the students to keep at the conclusion of the class. ***The class will also introduce students to the ACT as well and examine the difference between the two tests. Prerequisite: None

0375
FUNDAMENTALS OF PUBLIC SPEAKING AND BASIC ACTING
Weeks: 18
Grade: 9, 10, 11, 12
Credit: .5

Acting/Public Speaking is a performance-based class designed to teach basic acting and public speaking skills. The class is held half of the time in the classroom and half of the time on the auditorium stage. Students will study the proper organization and manner to orally present materials. Throughout the course, students will gain the confidence and ability to present to audiences. Students will regularly perform both individually and in groups.
Prerequisite: None

0380
CREATIVE WRITING
Weeks: 18
Grade: 10, 11, 12
Credit: .5

Creative Writing will explore self-expression by exposing students to a variety of poetic and prose structures and techniques. With the assistance of their peers in a writing workshop, students will compile a collection of original poetry and short stories that they share in class. Students should expect to read and write daily during the semester. Students will expand and refine their vocabulary. Students will prepare a text for submission for publication or contest.
Prerequisite: Must have completed 9th grade English

YEARBOOK

1425 and 1427
YEARBOOK I AND YEARBOOK II
Weeks: 36
Grades: *9, 10, 11, 12
Credit: 1

In this workshop course, students gain first-hand experience in planning, writing, organizing, and laying out materials essential to the High School Yearbook's theme, development, and publication. Students will learn to use various photo and web-based software and cameras in this course.

Prerequisite: 1425 Yearbook I: Teacher Recommendation

1427 Yearbook II: Yearbook I and Teacher Recommendation

*All 9th Grade Students Need 8th Grade English Teacher Recommendation

NEWSPAPER

1430

NEWSPAPER I

Weeks: 36

Grades: 9, 10, 11, 12

Credit: 1

Students will gain practical experience in all phases of publishing the school newspaper *The Silhouette*. Activities include news, editorial, feature, and sports writer for the monthly publications. Other activities include copy editing, graphic layout, design (desktop publishing), digital photography & editing, advertising, and distribution.

Prerequisite: Teacher Recommendation/JH Paper/English/ ALL STUDENTS ARE REQUIRED TO BE APPROVED BY THE SPONSOR.

1435

NEWSPAPER II

Weeks: 36

Grades: 10, 11, 12

Credit: 1

Students will gain practical experience in all phases of publishing the school newspaper *The Silhouette*. Activities include news, editorial, feature, and sports writing. Other activities include copy editing, graphic layout, and design (desktop publishing), digital photography, & editing, advertising, and distribution.

ALL STUDENTS ARE REQUIRED TO BE APPROVED BY THE SPONSOR.

Prerequisite: Newspaper I

1440

NEWSPAPER III

Weeks: 36

Grades: 11, 12

Credit: 1

Students will gain practical experience in all phases of publishing the school newspaper *The Silhouette*. Activities include news, editorial, feature, and sports writing. Other activities include copy editing, graphic layout, design (desktop publishing), digital photography & editing, advertising, and distribution. Experienced students have the opportunity to be awarded leadership positions as editors in all main writing and layout areas.

Prerequisite: Newspaper II / ALL STUDENTS ARE REQUIRED TO BE APPROVED BY THE SPONSOR

1445

NEWSPAPER IV

Weeks: 36

Grades: 12

Credit: 1

Students will gain practical experience in all phases of publishing the school newspaper *The Silhouette*. Activities include news, editorial, feature, and sports writing. Other activities include copy editing, graphic layout and design (desktop publishing), digital photography & editing, advertising, and distribution. Experienced students have the opportunity to be awarded leadership positions as editors in all main writing and layout areas.

Prerequisite: Newspaper III / ALL STUDENTS ARE REQUIRED TO BE APPROVED BY THE SPONSOR.

1450

SPORTS MEDIA AND LITERATURE

Weeks: 18

Grades: 10,11,12

Credit: 0.5

Examine the unique relationship between sports and society through literature by contemporary authors, columnists and other media. Reading will include high interest selections such as informational text, commentary, and biographies. Writing will include informative, narrative, and persuasive texts focused on specific sporting events and students will watch.

Prerequisite: Completion of Freshman English

FOREIGN LANGUAGE

Choose a foreign language based on interests, academic, and career goals. College-bound students in an academic or business course of study in high school should take 2-4 levels of Spanish or Italian. Foreign language classes increase students' language skills and overall academic performance. In addition, many colleges require 2-3 years of foreign language study in high school for various college majors. With this in mind, Ambridge Area High School offers five levels of Spanish and four levels of Italian.

0500

SPANISH I

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

Rigorous course requirements include frequent homework assignments, participation in class discussions, presentations, and various assessments. Spanish I introduces the principles of grammar and aims to build an active vocabulary. The culture and customs of Spain and Mexico and South America are given special attention via videos, readings, and discussions. Spanish influences in the U.S. are also discussed.

Prerequisite: 80% in English

0502

SPANISH II

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

Rigorous course requirements include frequent homework assignments, participation in class discussions, presentations, and various assessments. Spanish II aims to increase the basic knowledge of the language. Emphasis is placed on more conversations, reading, and writing skills. Basic grammar and vocabulary work are also increased. Cultural appreciation is enhanced by discussions dealing with the culture and customs of Spanish-speaking countries.

Prerequisite: 80% in Spanish I

0504

SPANISH III

Weeks: 36

Grades: 10, 11, and 12

Credit: 1

Rigorous course requirements include presentations, homework assignments, class discussions, and various assessments. Advanced grammar and composition in Spanish are emphasized. Skits and speeches in Spanish during the course increase proficiency. Spanish literature is also introduced via the short story. Active conversation is emphasized.

Prerequisite: 80% Spanish II

0506

SPANISH IV

Weeks: 36

Grades: 11, and 12

Credit: 1

Rigorous course requirements include presentations, homework assignments, class discussions, and various assessments. Emphasis is placed on strengthening grammar and conversation skills. In addition, students read short stories, mini novels, develop skits, dialogs, newspapers, children's books and research Spanish countries.

Prerequisite: 80% in Spanish III

0508
AP SPANISH V
Weeks: 36
Grades: 11, and 12
Credit: 1

Rigorous course requirements include presentations, homework assignments, class discussions, and various assessments. Students will use a variety of materials to further their knowledge in Spanish. Sources include magazines, newspapers, supplemental texts, and videos of Spanish. Emphasis on speaking through skits and listening to tapes is an essential part of this course.

Prerequisites: 80% in Spanish IV

0524
ITALIAN I
Weeks: 36
Grades: 9, 10, 11, and 12
Credit: 1

Rigorous course requirements include frequent homework assignments, participation in class discussions, presentations, and various assessments. Italian I presents the fundamentals of Italian grammar, pronunciation, conversation, and writing. Emphasis is on oral work and vocabulary building. Attention is given to the culture of the country through music, filmstrips, and readings.

Prerequisites: 80% in English

0526
ITALIAN II
Weeks: 36
Grades: 9, 10, 11, and 12
Credit: 1

Rigorous course requirements include frequent homework assignments, participation in class discussions, presentations, and various assessments. Italian II aims to increase speaking, reading, and writing abilities and gives the student a rapid survey of Italian history and some knowledge of the Italian contributions to the world. Emphasis is placed on comprehension of short stories and paragraphs, revision of grammar, more culture through slides, videos, and the use of computers.

Prerequisites: 80% in Italian I

0528
ITALIAN III
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

Rigorous course requirements include presentations, homework assignments, class discussions, and various assessments. The emphasis in this course is on speaking and grammar so students may work independently reading about topics of their choice in Italian. Students will be working and learning through a variety of sources and media.

Prerequisites: 80% in Italian II

0530
ITALIAN IV
Weeks: 36
Grades: 11, and 12
Credit: 1

Rigorous course requirements include presentations, homework assignments, class discussions, and various assessments. Students will use a variety of materials to further their knowledge of Italian. Sources include magazines, newspapers, supplemental texts, and videos in Italian. Emphasis on speaking through skits and listening to tapes is an essential part of this course.

Prerequisites: 80% in Italian III

HEALTH / PHYSICAL/EDUCATION

The Health & Physical Education curriculum comprises eleven courses developed to aid each student to acquire and utilize the knowledge and skills necessary to promote a positive individual and family lifestyle of health wellness. This will be achieved by the student being able to demonstrate appropriate responses in the areas of emergency situations; healthy dietary habits, nutrition; physical fitness and its direct relationship to good personal habits, disease prevention; substance abuse prevention; and the development of physical fitness through lifelong physical activities which promote a healthy lifestyle. This will be accomplished through leadership skills and cooperative learning in-group activities.

1500
H & PE I
Weeks:
18
Grades: 9, and 10
Credit: 0.5

The students will demonstrate knowledge of the three key elements of health (Physical, Mental/Emotional, and Social). Students will utilize various life skills to make healthy choices (communication, refusal skills, stress management, self-esteem, goal setting, etc.). Students will be able to identify the components and benefits associated with physical fitness and proper nutrition. Students will learn to prevent, identify and treat various injuries. In Physical Education, students will perform weight training to learn how to properly spot, perform exercises, and learn what muscles are being worked on. The overall physical education program is unique, with students being exposed to fitness, team sports, and lifetime/leisure activities.

Prerequisites: None (**This course is required for graduation**)

1505
H & PE II
Weeks:
18
Grades: 9, 10, and 11
Credit: 0.5

The Health and Physical Education curriculum is designed to facilitate the development of the “whole” student. Health behaviors and lifetime activities will be offered. Topics such as Tobacco Abuse Prevention, Nutrition and managing stress, prevention of communicable diseases, and Sexually Transmitted Diseases and Teen Dating Violence will be explored. The Physical Education curriculum allows the student to choose various physical activities that meet their individual preferences and activity needs.

Prerequisites: H & PE I (**This course is required for graduation**)

1510
H & PE
III
Weeks:
18
Grades: 10, 11, and 12
Credit: 0.5

Students will learn behaviors important in maintaining a healthy adult lifestyle and behaviors necessary in meeting the individual's social, physical, and emotional needs. Students will discuss topics such as Individual Growth and Development, Family Development, and Alcohol Abuse Prevention. The Physical Education curriculum allows the student to choose from a variety of physical activities that meet his/her personal interests and individual needs for fitness.

Prerequisites: H & PE I & II (**This course is required for graduation**)

PHYSICAL EDUCATION IV

To complete all Health and Physical Requirements, all students must take 0.5 PE Elective within four years. These courses must be taken as an elective in addition to the required PE/HEALTH credits. Students can also take any of the below classes as an added elective after completing the 0.5 PE credit required for graduation.

1515

RACQUET SPORTS/LEISURE

ACTIVITIES Weeks: 18 (5 days a week)

Grades: 11, and 12

Credit: 0.5

This course focuses on three racquet sports: Pickleball, Table Tennis, and Badminton. Instruction will be prioritized so that students are proficient in each sport. Both Recreational games and competitions (tournament style) will be provided during each instructional unit. The course will also offer various recreational activities that will help promote lifetime fitness.

1522

FITNESS WALKING

ELECTIVE Weeks: 18 (5 days a week)

Grades: 10, 11, 12

Credits: 0.5

This course will introduce a lifelong fitness activity young people can participate in independently throughout their lives. The purpose of this course is to increase heart rate and emphasize fitness rather than sport. This course is a great way to maintain target heart rate, reduce impact on joints, reduce stress, increase cardiorespiratory stamina and prevent injuries.

1520

WEIGHT TRAINING

Weeks: 18

Grades: 10, 11, and 12

Credits: 0.5

Students in Weight Training will be offered a beginner and advanced training program. The class will begin with the instructor teaching and planning the exercise program. Students will then have the opportunity to design and implement their own program to accomplish their personal fitness goals. This course is designed for beginners and advanced lifters since there is a basic and advanced training program to execute.

Prerequisite: Physical Education I

1525

TEAM SPORTS

Weeks: 18

Grades: 10, 11, and 12

Credit: 0.5

The course focuses on four team sports: Softball, Hockey, Football, and Basketball and other various games. Each sport will last four weeks and the last two weeks will be student choice of the four units. Students will play highly competitive games in this course.

1526

BASKETBALL FUNDAMENTALS AND GAMES (3 Sections)

Weeks: 18

Grades: 10, 11, and 12

Credit: 0.5

Students will learn the overall fundamentals of basketball but at the same time play highly competitive games. Tuesdays and Thursdays will have a focus on the fundamental skills. Mondays, Wednesdays and Fridays will focus on gameplay. Normal gameplay will be utilized during this course but students will also compete in various basketball small area games.

1535

ADAPTIVE PHYSICAL EDUCATION

Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

The Adaptive Physical Education Program is designed to meet the needs of the individual who is unable to participate safely and successfully in the unrestrictive activities offered by the regular Physical Education curriculum due to physical or medical issues. These classes offer the special needs student a diversified program of developmental activities, games, sports, and rhythms suitable to the capabilities and limitations of the student. Formal approval by the student's physician and parents must be received by the administration prior to the student's registration into this class. Student most likely will have an IEP for the class.

1540

NUTRITION AND FITNESS

Weeks: 18

Grades: 9, 10, 11, 12

Credit: .5

This course is designed for the student who wants to change their body composition. Students will be required to download the My Fitness Pal app and track their daily calorie intake. Students will do resistance training Monday, Wednesday, Friday and will walk/jog on Tuesdays and Thursdays. There will be classroom instruction on Hydration, proper nutrition and maintaining a Healthy Body Composition Throughout Life.

J.R.O.T.C.

JROTC CITIZENSHIP/LEADERSHIP DEVELOPMENT PROGRAM AT AMBRIDGE AREA HIGH SCHOOL

0090	JROTC I Leadership Education (LE) I	1st Year	Credit 1 Grades: 9-12
0092	JROTC II Leadership Education (LE) II	2nd Year	Credit 1 Grades: 10-12
0094	JROTC III Leadership Education (LE) III	3rd Year	Credit 1 Grades: 11-12
0096	JROTC IV Leadership Education (LE) IV	4th Year	Credit 1 Grades: 12
0098	Advanced Leadership Course (Learning Levels I-IV)		Credit 1 Grades: 9-12

The purpose of the program is to develop students (cadets) into smart, strong, confident leaders who eventually embark upon a lifetime of noble citizenship by living by our core values of honor, courage, and commitment. We encourage students (cadets) to develop habits of orderliness and precision, respect for established authority, self-confidence, responsibility, and high standards of personal honor and conduct. Discipline and teamwork will be major factors in the program. Responsibility and accountability will be paramount. Since the cadets will be representing the United States Marine Corps, they will be required to adhere to the regulations set forth by the Uniform Regulations Manual concerning uniform wear and grooming standards. There is NO obligation to any student (cadet) to join the military after high school. However, the benefits are numerous to a cadet if he/she decides to join the military and/or applies for a military scholarship to college. Another highlight of the MCJROTC program is our Career Exploration Program (CEP), part of our college and career readiness training. This program helps our cadets successfully explore interests, skills, and values, and careers out there.

Junior Reserve Officers Training Corps (JROTC) Cadets (male and female) are taught the principles and traits of leadership and how to apply them. They are taught the rights and responsibilities of good citizenship. They are taught elementary military skills such as map and compass reading, drills and ceremonies, military organization, and mental and physical fitness. The cadets will be required to learn and improve their physical fitness abilities every week. The cadets will be taught firearm safety and marksmanship skills in the program. Each cadet will be encouraged to participate in the marksmanship program, however not mandatory.

There may be times after school team participation will be mandatory for our drill, color guard, air rifle, and athletic teams.

All cadets are encouraged to participate in parades, drill meets, and various field trips to military bases and historical sites. The cadets will provide community service for various civic organizations within the surrounding communities and the Ambridge Area School District. Cadets are promoted to a position for leadership (Officers and Non-Commissioned Officers) based on demonstrated knowledge, performance, conduct, and ability. Each cadet is provided with uniforms and all workbooks and texts as needed. Cadets are required to wear the uniform at least once per week, usually on Wednesdays and on the days they are assigned flag raising duties. There is no cost to the cadet for these uniforms unless they abuse or lose them. There will be a Uniform Inspection once a week, which will be graded. They are required to bring their Physical Training (PT) gear every Thursday for PT. The cadets will be issued MCJOTC PT shorts and a green t-shirt.

The training highlights of the year for the MCJROTC program are the Promotion night in November, Unit Inspection from the MCJROTC Headquarter out of Quantico, Va., and the Orientation Trip every spring to Hawaii, Parris Island or historical sites such as the Marine Corps Museum, Gettysburg Battlefield or Shanksville, Pa. the flight 93 memorial, etc. In April, there will be a family-oriented Annual Marine Ball with dinner and a ceremony, all of which will be planned, prepared, and performed by the cadets. This will also be awards night for those cadets who have gone above and beyond as leaders in the program. Family members are encouraged to attend this wonderful event. We also attend a high adventure leadership camp every fall at Camp GUYASUTA.

Prerequisite: Students will be encouraged to maintain a 2.5 cumulative grade point average during any academic year and attendance to remain in good standing

ADVANCED LEADERSHIP COURSE (Learning Levels I-IV)

The Advanced Leadership Course aims to develop the planning, organization, teamwork, and communication skills of the individual cadet. Leadership, discipline, and participation will be major elements of this course. All participants "MUST" be enrolled in a traditional JROTC class to participate in this class. However, there is NO obligation to any student (cadet) to join the military. All cadets in this program WILL be required to plan and organize various JROTC related events throughout the school year, and it is highly encouraged that they participate in various leadership camps during the summer. The cadets enrolled in this program will also be required to create an outline and give formal presentations. Additionally, they will be required to be actively involved in our after-school activities and **be members of at least one team.**

The training highlights of the year include the planning and preparation for our Annual Unit Inspection conducted by the United States Marine Corps, the planning and organization of the Annual Military Ball/Awards Ceremony, the Memorial Day, and Veterans Day

Parades our annual field trips and promotion night. They will earn their Dress Blue uniform by learning Color Guard, sword manual, and how to command platoon drill, and they will participate in a Leadership book study.

JROTC ELIGIBILITY and PREREQUISITES (Learning Levels I – IV) and Advanced Leadership: Out of District Enrollment

Here at Ambridge Area School District, students outside of AAHS are provided the opportunity to elect to participate in the JROTC program. They will receive one (1) credit towards graduation for each successful year in JROTC. The purpose of the program is to encourage students (cadets) to develop habits of orderliness, precision, and self-confidence to be productive and successful members of a global society. At Ambridge Area School District, cadets are held to a high standard of responsibility, personal honor, conduct, and respect for established authority here at the district level. In every effort to continue holding cadets to a high standard of excellence while also ensuring their educational goals are adhered to and followed on all levels, cadets will be required to submit necessary documentation in addition to completion of an enrollment form to Ambridge Area School District before their acceptance into the JROTC program. After completion, enrollment forms will be reviewed on a case-by-case basis, and acceptance into the program will be based on the administrative and supervisory teams in addition to the instructor's discretion.

As responsibility and accountability are paramount to the program, cadets will be held to an academic standard of maintaining a 2.5 cumulative grade point average during their enrollment. Assistance from the district to maintain the designated grade point average will be provided at all levels. Cadets falling below the designated grade point level will meet with their JROTC instructors and school counselor and be placed on a probationary period to improve their academics. Parent/guardians will be notified throughout the process if their cadet falls below the required academic standings. After two -consecutive nine-week probation periods without improvement, the team will meet and discuss placement and eligibility requirements to remain in the program.

Disciplinary actions will be reviewed during the cadet's involvement in the program. After three disciplinary referrals warranting intervention, the team will meet to discuss appropriate placement at that time. At the team's discretion, termination from the program may be warranted if a violation of the above procedures and protocols continues after the probationary period and school interventions are completed. Immediate termination from the program may also be warranted for disciplinary actions resulting in suspension/threats/bodily harm and actions warranting immediate intervention at the administration and instructor's discretion. Disciplinary actions will be reviewed on a case-by-case basis, and immediate discharge from the program may be warranted at the administration's discretion, with alternative placements to be discussed. Disciplinary actions for out-of-district students will also be reviewed per case basis, where immediate discharge from the program and district will be at the discretion of AASD and the instructors.

Cadets' attendance is also paramount to their success in the program and overall academic achievement and success. Cadets who violate the attendance policies and codes at Ambridge Area School District will be reviewed, and continued enrollment/dismissal in the program will be discussed with the administrative team and instructors at that time. Attendance will continue to be strongly advised and encouraged to ensure successful completion of their educational years while enrolled in the JROTC program at Ambridge Area High School.

Our goal is to ensure all cadets in the program continue demonstrating discipline in academics and behavior while succeeding with honor and success at all levels in the program. The program will continue to hold cadets to high standards of excellence while building leadership qualities throughout their educational years. Requirements are also placed to assist cadets in being productive and successful members of a global society after transitioning from post-secondary education. As per the curriculum and learning, cadets in the JROTC program are provided the opportunity to learn life-long skills to help their future careers and endeavors after graduation while also building self-confidence and responsibility that are paramount for success.

FAMILY AND CONSUMER SCIENCE

The Family and Consumer Science program offers courses which are designed to prepare students for independent living. Students acquire knowledge and demonstrate skills in four basic areas of study.

Financial and Resource Management
Balancing Family, Work, and Community Responsibility
Food Science and Nutrition
Child Development

Additionally, courses offered will introduce students to potential careers in all of these areas. Skills are acquired in identifying and solving problems encountered in everyday living and in gaining employment. A positive attitude and good work habits are stressed to prepare students for future personal and public responsibilities. Students selecting courses from the Family and Consumer Science department will gain skills and knowledge that last a lifetime.

***A Lab Fee of \$5.00 applies to each Family and Consumer Science, Food & Nutrition course taken.**

0400
FAMILY AND CONSUMER SCIENCE I
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5

The first half of this course focuses on consumer finance. Students will learn the importance of budgeting. They will read and understand a standard apartment lease and set up a roommate agreement. Students will compare methods of purchasing a car and use unit pricing to compare food costs. The basics of checking accounts and credit cards are explained. Basic cooking techniques are taught, beginning with breakfast foods and culminating with meats & poultry. Students are also taught the basics of baking, including cookies, quick bread, and yeast bread.
Prerequisite: None

0405
FAMILY AND CONSUMER SCIENCE II
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5

This Level II course instructs students in the areas of parenting and child care. The stages of child development, the value of play, child care, special needs children, and common childhood problems are explored. In the second half of the class, students build on previously taught cooking techniques. In baking, students will learn to make a pie from scratch. They will explore cooking with fruits and vegetables as well as different grains to make healthy meals.
Prerequisite: Family and Consumer Science I or teacher recommendation

0410
FAMILY AND CONSUMER SCIENCE III
Weeks: 18
Grades: 10, 11, and 12
Credit: 0.5

Students will expand upon their knowledge of consumer education to better understand savings plans, investments, and the use of financial services. Information on health, home, auto, and life insurance will be given. Students will explore more advanced techniques in foods and nutrition, such as working with puff pastry and phyllo dough. Beginning cake decorating will be taught, and students will decorate their miniature cakes. Additionally, students will learn to use seasonal ingredients for the best selection, flavor, and cost-effective meals.
Prerequisite: Family and Consumer Science II or teacher recommendation

0415

FAMILY AND CONSUMER SCIENCE IV

Weeks: 18

Grade: 10, 11, and 12

Credit: 0.5

This final course begins with a focus on marriage & family as well as housing and interior design. Students will focus on relationships and the decision to get married. They will explore what is involved in planning a wedding and staying within a budget. Students will then explore housing options and interior design techniques, including space, color, lighting, and furniture options. The foods unit will address differing diet requirements for different family members and those with health issues. Students will be instructed in ethnic foods and cooking techniques.

Prerequisite: Family and Consumer Science III or teacher recommendation

0420

ADVENTURES IN FOOD

Weeks: 18

Grade: 10, 11, and 12

Credit: 0.5

This semester-long foods course is designed for students interested in expanding their culinary knowledge. This course will challenge students to prepare more involved recipes from foods suited to entertaining, such as appetizers and trifles, to everyday comfort foods like casseroles and crisps. This course will also examine possible careers in the foodservice industry and some of the educational and training programs available.

Prerequisite: Family and Consumer Science I & II Lab Fee - \$20

MATH

The math department offers a variety of course selections for a variety of skill levels. Success in math depends upon ability. Please read the Prerequisites carefully and discuss the course(s) that best fit your needs and aptitudes with your family and math teacher. (Try to plan your “math career” and always keep in mind where you want to go and what course you need to get there.) Many colleges require that you at least take algebra. If you have questions or concerns, ask a math teacher for help.

0620
ALGEBRA
I Weeks: 36
Grades: 9
Credit: 1

Algebra I is a required course before Algebra II and Geometry. The course consists of solving and graphing equations and equalities in one and two variables, polynomials, factoring, quadratic equations, proportions, probability, and statistics. Throughout the year, in almost every section, students will do **problem-solving**, often with **fractions**. **Coming into Algebra I, students should be 100% fluent in multiplication facts from 1 through 12, all operations with fractions, and the concept of a variable. Students should also be able to graph on the coordinate plane.

**Prerequisite: Teacher recommendation

0622
ALGEBRA IA
Weeks: 36
Grades: 9
Credit: 1

This course is designed for students who need more time and more in-depth training to bridge arithmetic to the abstract language of algebra. The course involves arithmetic training and skill development with signed numbers and fractions. Algebra content will be presented over two years to better prepare the students to complete the PA State Keystone Algebra I Exam. Students are expected to successfully complete quizzes, tests, classroom, and daily assignments. This course only qualifies for a 0.5 credit towards NCAA eligibility.

Prerequisite: Teacher recommendation

0623
ALGEBRA IB
Weeks: 36
Grades: 10 & 11
Credit: 1

This course is a continuation of Algebra IA. Algebraic concepts will be the focus. The course involves arithmetic training and skill development with signed numbers and fractions. At the conclusion of this course, students will take the Keystone Algebra Exam. Students are expected to successfully complete quizzes, tests, classroom and daily assignments.

Prerequisite: Algebra IA or teacher recommendation.

0625
PLANE/SOLID GEOMETRY
Weeks: 36
Grades: 9, 10, 11
Credit: 1

This course is designed to develop a comprehensive knowledge of geometry. Students are advised that geometry is important in preparation for taking the SAT exam. Major units of work include congruent triangles, perpendiculars, parallels, angles, parallelograms, trapezoids, circles, congruence, similarity, angle measurements, area of plane figures, and methods of proof.

Prerequisite: Algebra I and Algebra II

0627

FUNDAMENTALS OF GEOMETRY

Weeks: 36

Grades: 11, and 12

Credit: 1

Fundamentals of Geometry is a slower-paced course in Geometry. This course included the principles of plane and solid geometry (e.g., methods of deductive reasoning, angle relationships, parallel and perpendicular lines, congruent triangles, arcs and angles as related to the circle, area of polygons, area, and volumes of solids) without as much emphasis on proof. Algebra skills will be practiced and reviewed, and applied to geometric topics such as the Pythagorean Theorem. This course is important for those students considering a technical or vocational program after high school.

Prerequisite: Teacher recommended / Algebra I and Fundamentals of Algebra II or Algebra II

0630

HONORS PLANE/SOLID GEOMETRY

Weeks: 36

Grades: 9

Credit: 1

This course is designed for the student who displays an above average skill in mathematics. Students enrolled in this course must be able to reason deductively. Particular emphasis is placed on geometric proofs and the use of geometric formulas. Major units include congruent triangles, perpendiculars, parallels, angles, parallelograms, trapezoids, circles, congruence, similarity, and angle measurement, area of plane figures, surface area, volume, and methods of proof. Class activities include lecture and demonstration, group work, problem-solving practice, and daily assignments.

Prerequisite: A in Algebra I

0635

ALGEBRA II

Weeks: 36

Grades: 9, 10

Credit: 1

This course assumes the student is acquainted with the language of algebra and has at least average dexterity in the manipulation of algebraic expressions, equations, and inequalities. Students will solve quadratic equations and systems of equations/inequalities with up to three variables. Also covered are polynomial and radical expressions, logarithms, and a **substantial** amount of **problem solving**. Students are expected to successfully complete quizzes, tests, daily classroom and homework assignments.

****Coming into Algebra II, students should be 100% fluent in multiplication facts from 1 through 12, all operations with fractions, and all Algebra I concepts, especially solving multi-step equations with fractions and graphing linear equations.****

Prerequisite: C or better in Algebra I

0636

FUNDAMENTALS OF ALGEBRA II

Weeks: 36

Grades: 9, 10

Credit: 1

Fundamentals of Algebra II is a slower paced Algebra II course. Students will review Algebra I concepts during the first nine weeks and will also prepare for the Keystone Algebra Retake in the winter.

Prerequisite: Algebra I and teacher recommendation

0640

HONORS ALGEBRA

II Weeks: 36

Grades: 10

Credit: 1

This is a more rigorous study of Algebra II for the college bound student. The basic subject matter contained in this course is the same as Algebra II; however, the degree of problem difficulty is increased. Students will use the graphing calculator to solve real world applications. Students will be exposed to concepts that will prepare them for pre-calculus.

Prerequisite: "A" in Algebra I and recommendation of current Geometry teacher.

0645

TRIGONOMETRY

Weeks: 36

Grades: 11 and 12

Credits: 1

Trigonometry, a yearlong course that prepares students for further studies of mathematics. The course begins by teaching students to measure angles in degrees and radians, arc lengths, and chords. Students then study the basic trigonometric functions, sine, cosine, and tangent, and their inverses, as well as the relationships of these functions to chords and right triangles. In addition, students apply their study of trigonometric functions and identities to find angles of elevation and depression and solve right triangles.

Prerequisite: Successful completion of Algebra I, Geometry, and Algebra II

0650

AP® STATISTICS

Weeks: 36

Grades: 10, 11 and 12

Credit: 1

AP courses in statistics consist of a full high school academic year of work and are comparable to courses in colleges and universities. It is expected that students who take an AP course in statistics will seek college credit, college placement, or both from institutions of higher learning. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1. Exploring Data: Describing patterns and departures from patterns 2. Sampling and Experimentation: Planning and conducting a study 3. Anticipating Patterns: Exploring random phenomena using probability and simulation 4. Statistical Inference: Estimating population parameters and testing hypotheses. Students should expect project-based assignments during each semester.

Prerequisite: 78% or better in Algebra II

0655

PRE-CALCULUS: THROUGH COOPERATION WITH CARLOW

Weeks: 36

Grades: 11, and 12

Credit: 1

This course is designed to prepare the academic math student for a calculus course in their next school year. It includes the study of various functions: exponential, logarithmic, and trigonometric functions. The complete graphs of the various functions and solutions to equations involving those functions will constitute a major portion of the course. Scientific and graphing calculators are used throughout the course to help the student connect the theory with real-world problems. A comprehensive study of trigonometry is included. Students have the option to take this class for three college credits through the College in High School Carlow University Program. A nominal fee may apply to receive college credit.

Prerequisite: "A or B" in Honors Algebra II, or A's in both Geometry, Algebra II and teacher recommend

0660

CALCULUS

Weeks: 36

Grades: 12

Credit: 1

This course is for students who plan to major in mathematics, engineering, or any specialized scientific or medical field of study in college. A continuation of topics covered in Pre-Calculus will be explored. Also included will be the study of derivatives and integrals of algebraic, trigonometric, and transcendental functions and their application to real-world problems. A graphing calculator will be used throughout the course.

Prerequisite: Pre-Calculus and teacher recommendation required.

0665

ADVANCED PLACEMENT CALCULUS AB®

Weeks: 36

Grades: 11, 12

Credits: 1

AP courses in calculus consist of a full high school academic year of work and are comparable to calculus courses in colleges and universities. It is expected that students who take an AP course in calculus will seek college credit, college placement, or both from

institutions of higher learning. AP Calculus AB® is the equivalent of a Calculus 1 course in college. Students will learn at least all of the topics covered on the AP exam, including differential calculus and integral calculus of a single variable, with early transcendentals. Students are highly encouraged to take the Advanced Placement Exam at the end of the course for college credit. A graphing calculator, preferably the TI-84, will be used extensively throughout the course. Class will meet 7 or 8 periods a week, depending on the semester, as one class period every other day is shared with AP Physics. Prerequisite: “A” in Pre-Calculus and teacher recommendation required.

0670

ADVANCED PLACEMENT CALCULUS BC®

Weeks: 36

Grades: 12

Credits: 1

AP courses in calculus consist of a full high school academic year of work and are comparable to calculus courses in colleges and universities. It is expected that students who take an AP course in calculus will seek college credit, college placement, or both from institutions of higher learning. AP Calculus BC® is the equivalent of a Calculus 2 course in college. The topics for the course begin where AP Calculus AB® left off. They will include additional integration techniques, calculus with polar and parametric equations, sequences and series. Students are highly encouraged to take the Advanced Placement Exam at the end of the course for college credit. A graphing calculator, preferably the TI-84, will be used extensively throughout the course. Prerequisite: “A” in AP Calculus AB and teacher recommendation required.

0675

SAT PREPARATION/MATH

Weeks: 18

Grades: 10, 11, and 12

Credits: 0.5

This nine-week section of a one-semester course is designed to help prepare students planning on taking the SAT test. The math area stresses problem-solving techniques with an emphasis on basic arithmetic, Algebra, and Geometry. It is accompanied by a nine-week section on verbal preparation. Students planning to take the SAT test during the fall should take this course in the spring, and students planning on taking the SAT test in the spring should take this course in the fall. A nominal fee of \$25 will be applied towards the purchase of individual classroom materials. These materials will be the students to keep at the conclusion of the class. Prerequisite: None

0680

COLLEGE ALGEBRA: THROUGH COOPERATION WITH CARLOW UNIVERSITY

Weeks: 36

Grades: 11, and 12

Credit: 1

This course is intended to ease the transition for the study of college mathematics. The successful student should be able to acquire a basic vocabulary in mathematics, develop basic skills in manipulating and simplifying algebraic expressions, acquire expertise in solving polynomial equations, linear inequalities, equations involving rational expressions, equations with one radical, and exponential and logarithmic equations, and also graph basic linear, quadratic, absolute value, exponential and logarithmic functions. The course can be followed by Pre-Calculus or Statistics, or the course can be the last math course, depending on the student's curriculum. Students have the option to take this class for three college credits through the College in High School Carlow University Program. A nominal fee may apply to receive college credit.

Requirements: Grade of “C” or better in Algebra II and Geometry. A course fee will apply if taking the class for college credit. This course cannot be taken concurrently with Pre-Calculus.

685

CS PYTHON FUNDAMENTALS I

Weeks: 18

Grades: 9, 10, 11, and 12

Credit: .5

In this course, students will learn the basics of coding in the Python language, along with the basic principles of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. Students may take this course before or after they have taken AP® Computer Science Principles or AP® Computer Science A courses, or they may take it concurrently with either of them. This course is a prerequisite for Python Fundamentals II, which is typically offered during the second semester.

Python Fundamentals lays the foundation for coding skills that could be used in a variety of careers such as software development, data science and analytics, and cybersecurity.

Prerequisites: While no prior computer science knowledge or experience is necessary for this course, students should ideally have passed Algebra I or be concurrently enrolled.

Topics Covered:

Unit 1: Beginning in Computer
Science Unit 2: Number Calculations
and Data Unit 3: Making Decisions
Unit 4: Repetition and Loops
Unit 5: Graphics

686

CS PYTHON FUNDAMENTALS II

Weeks: 18

Grades: 10, 11 & 12

Credits: .5

This course picks up where Python Fundamentals I ended. In this course, students will learn how and when to write their own functions. They will also be able to use one and two dimensional array structures to deal with more complex data than in the first semester. Like Python Fundamentals I, this course will help students to continue to build the foundation for coding skills that could be used in a variety of careers such as software development, data science and analytics, and cybersecurity.

Prerequisites: CS Python Fundamentals I

Topics Covered:

Unit 6: For Loops
Unit 7: Text and String Processing
Unit 8: Functions
Unit 9: Arrays
Unit 10: 2D Arrays
Unit 11: Internet

0687

GAME DEVELOPMENT WITH JAVASCRIPT – PART 1

Weeks: 18

Grades: 10, 11, and 12

Credits: 0.5

The CodeHS video game design curriculum teaches the foundations of creating video games in JavaScript. While this course is introductory, it is an honors-level course. Its curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. Once students complete the course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript. The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code in the browser. The teacher will utilize tools and resources provided by CodeHS to leverage time in the classroom and give focused 1-on-1 attention to students. Each module of the course is broken down into lessons.

Lessons covered in semester 1:

Module 1: Intro to JavaScript with Karel the Dog
Module 2: JavaScript and Graphics
Module 3: Guessing Game
Module 4: Animation and Games
Module 5: Crazy Ball Game

Prerequisites: There are no computer science prerequisites, but students should have successfully completed Algebra 1, and currently be taking Geometry or Algebra 2, or a higher math class.

0688

GAME DEVELOPMENT IN JAVASCRIPT – PART 2

Weeks: 18

Grades: 10, 11, and 12

Credits: 0.5

The CodeHS video game design curriculum teaches the foundations of creating video games in JavaScript. While this course is introductory, it is an honors-level course. Its curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. Once students complete the course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript. The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code in the browser. The teacher will utilize tools and resources provided by CodeHS to leverage time in the classroom and give focused 1-on-1 attention to students. Each module of the course is broken down into lessons.

Lessons covered in semester 2:

Module 6: Project – Breakout

Module 7: Project – Fun Snake

Module 8: Basic Data Structures

Module 9: Project – Tic Tac Toe

Module 10: Game Design Components

Module 11: Final Project – Build Your Own Game!

Prerequisites: Game development with JavaScript – Part 1 (no exceptions!)

0685

AP® COMPUTER SCIENCE PRINCIPLES

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

AP® Computer Science Principles is a complete, full-year course developed in partnership with the University of Texas at Austin's UTech Institute that focuses on the 7 "Big Ideas" in computer science using project-based approaches. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the internet, cybersecurity, and how computing impacts our world. Students will develop the computational thinking skills needed to fully exploit the power of digital technology and help build a strong foundation in problem-solving.

Prerequisites: No prior computer science knowledge or experience is necessary for this course. Students should have passed Algebra I or be concurrently enrolled. This course will prepare students for the end-of-course AP Exam.

Unit 1: Computational Thinking

Unit 2: Programming

Unit 3: Data Representation

Unit 4: Digital Media Processing, Create Performance Task

Unit 5: Big Data 33

Unit 6: Innovative Technologies, Explore Performance Task

0690

AP® COMPUTER SCIENCE A

Weeks: 36

Grades: 10, 11, and 12

Credit: 1

AP Computer Science A® introduces students to object-oriented programming using the Java language and is meant to be the equivalent of a first semester, college-level course in computer science. It emphasizes problem solving and algorithm development, and uses hands-on experiences and examples so that students can apply programming tools and solve complex problems. Students electing to take this course should be motivated and disciplined to work towards solving complex problems. This course lays the foundation for coding skills that could be used in a variety of careers such as software development, game design, and cybersecurity. Prerequisites: Algebra 1 is required; Algebra II is recommended. Passing AP® Computer Science Principles or Python Fundamentals is recommended but not required.

This course will prepare students for the end-of-course AP Exam.

Unit 1: Intro to Java
Unit 2: Strings and Loops
Unit 3: Strings and One-Dimensional Arrays
Unit 4: Methods
Unit 6: Advanced Classes
Unit 7: Exam Prep

0220
CAREER READINESS
Weeks: 36
Grades: 11 & 12
Credit: 1

Whether you are college-bound or going directly into the workforce, this course will focus on basic skills required for any occupation now or in the future. This course will focus on three foundational skills essential to success in most jobs and aligned to the Federal Bureau of Labor Statistics: Workplace Documents, Applied Mathematics, and Graphic Literacy. Students will prepare for the National Career Readiness Certificate by demonstrating proficiency in these three areas. The NCRC is an assessment-based credential that collaborates with the ACT testing service that measures and certifies the essential work skills needed for success in jobs across industries and occupations. The certificate was created to help employers certify that a recipient possesses competency skills required by more than 90 percent of all jobs. The questions and problems in this course utilizing the ACT WorkKeys Curriculum interactive training system are similar to those on the actual certification exam and test-taking tips and problem-solving hints that prepare you to achieve an excellent score.

This course is designed primarily for juniors and will satisfy the Career Readiness Standards put forth by Pennsylvania Department of Education

Pre-requisite: Teacher Recommendation

Course Outline: The Course will cover three areas including Workplace Documents, Applied Math and Graphic Literacy:

0205
WORKPLACE READINESS
Weeks: 36
Grades: 11, 12
Credit: 1

For the first three nine-weeks, students will be using the curriculum provided on the ACT website to prepare to take the ACT Work Keys as a graduation requirement. Students will also receive a math credit for this course. For the last nine-weeks, students will be introduced to material from the Next Gen Personal Finance course in order to gain essential knowledge and skills to make informed decisions about real world financial issues. Students will also learn to apply decision-making skills to evaluate career choices and set personal goals. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success.

Pre-requisite: Teacher Recommendation, This course is designed to be sequential to Career Readiness but is not required.

Brief Course Outline:

- Creating Career Goals – Exploring Careers with O*Net Interest Profiler test
- Financial Awareness- Checking and Savings, Budgeting, Credit cards, Insurance, Saving and Investing for retirement
- Preparing for a career- Writing a Resume, Job Search Strategies, Applying for a Job, Interviewing Strategies
- Real world Experience – Job Shadowing, Mentoring, Guest Speakers, Career Ladders

Ambridge Area School District Math Course Mapping

Please Note: Based on a student's performance, the current math teacher may recommend that the student move to a different pathway.

6	7	8	9	10	11	12
Accelerated Math 7	Algebra 1	Geometry	Honors Algebra 2	Pre-Calculus	AP® Calculus AB	AP® Calculus BC
Advanced Math 6	Advanced Math 7	Algebra 1 (80% + Keystone)	Honors Geometry & (Honors Alg. 2: if wanting AP® Calc. BC)	Honors Algebra 2 Pre-Calculus	Pre-Calculus AP® Calculus AB	Calculus AP® Calculus BC
		Algebra 1 (75%+ Keystone)	Algebra 2	Geometry	Pre-Calculus College Algebra AP® Statistics	Calculus College Algebra AP® Statistics
		Algebra 1 (<75%)	Algebra 1 (C will count as a H.S. MATH CREDIT)	Algebra 2	Fundamental of Geo. Geometry Career Readiness	Trigonometry Pre- Calculus College Algebra AP® Statistics Workplace Readiness (MFDL)
Math 6	Math 7	Math 8	Algebra 1	Fundamentals of Algebra 2 Algebra 2	Fund of Geometry Geometry Career Readiness	Trigonometry Pre- Calculus College Algebra AP® Statistics Workplace Readiness (MFDL)
			Algebra IA (Teacher Recommendation)	Algebra IB	Fund. Of Geometry Career Readiness	Workplace Readiness MFDL
Learning Support Math 6	Learning Support Math 7	Learning Support Math 8	Algebra IA (Teacher Recommendation)	Algebra IB	Career Readiness Fundamentals of Geometry	Workplace Readiness (MFDL)

MUSIC

The High School Music Program attempts to stimulate the student to take an active part in musical activities and to develop an aesthetic understanding of the Fine Arts.

0705

BAND

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

This is a performing group that stresses ensemble playing. This course includes Marching Band. The remaining time will be divided into Symphonic and Concert Band. Band camp is required and will include all auxiliary units. Attendance and performance at Band Camp will be included in the first nine weeks grade. Junior High Band Director's recommendation is required.

Prerequisites: Teacher recommendation

0710

JAZZ BAND

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

This jazz band is a performing group that fosters elective creativity through the use of improvisation. It promotes the student's sense of true ensemble technique because of the small size of the group. This class can develop all the usual skills acquired in any performing group, as well as a dose of jazz history.

Prerequisites: Teacher recommendation

0715

BAND AUXILIARY

Weeks: 18

Grades: 9, 10, 11, and 12

Credit: 0.5

Students who try out and successfully make one of the several band auxiliary units (belles, silks, flags, or color guard) have an option of signing up for this course or participating as an extracurricular activity. Students who sign up for the course will receive a grade and .5 credit and must attend one semester during the school year. For credit, students will be required to attend band camp, evening rehearsals, and any additional rehearsals called outside the school day. They are also required to participate in all band performances and attend Band Auxiliary class during the school day. Students participating as extracurriculars will be required to attend band camp, evening rehearsals, and any additional rehearsals outside the school day. They are also required to participate in all band performances. Those participating as an extracurricular activity must also be aware that due to changes in field drills over the course of the season, they may be assigned different responsibilities and movements during performances. Students must try out and be selected for one of the squads. All school rules will apply to all participants when participating as a part of this group.

Prerequisites: Successful audition.

0720

STEEL BAND I

Weeks: 36

Grades: 9, 10, 11, and 12

Credit: 1

This class is the first class of a three year track that creates a unique performing ensemble that will enable students to learn and understand the steel pan art form. Students will develop skills necessary to play unique percussion instruments, learn the cultures of other countries and enhance their overall understanding of musicianship. Students will be given the opportunity to perform in the annual Spring Steel Band Concert. **Students must remain in a HS performing ensemble, including band or chorus to be eligible for this class.**

Prerequisites: Maintained enrollment in MS Band or Chorus and teacher approval

0725
STEEL BAND II
Weeks: 36
Grades: 9, 10, 11, and 12
Credit: 1

This class is the second class of a three year track that creates a unique performing ensemble that will enable students to learn and understand the steel pan art form. Students will continue to develop skills necessary to play unique percussion instruments, learn the cultures of other countries and enhance their overall understanding of musicianship. Students will be given the opportunity to perform in the annual Spring Steel Band Concert. **Students must remain in a HS performing ensemble, including band or chorus to be eligible for this class.**

Prerequisites: Maintained at least an 85% in Steel Band I and teacher approval

0730
STEEL BAND
Weeks: 36
Grades: 9, 10, 11, and 12
Credit: 1

This class is the final class of a three-year track that creates a unique performing ensemble that will enable students to learn and understand the steel pan art form. Students will continue to develop skills necessary to play unique percussion instruments, learn the cultures of other countries and enhance their overall understanding of musicianship. In addition to performing in the annual Spring Steel Band Concert, students will be given many opportunities to perform off-campus at various events around the region. **Students must remain in a HS performing ensemble, including band or chorus, to be eligible for this class.**

Prerequisites: Maintained at least a 90% in Steel Band II and teacher approval

0735
KEYBOARD LAB I
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5

Keyboard Lab is for students who want to become more proficient piano and synthesizer players through individualized instruction and with the help of computer-aided instruction. Grades are based on the amount of progress. Students must provide their own headphones. Students intending to enroll the entire year must also schedule Keyboard Lab II.

Prerequisites: None

0745
KEYBOARD LAB II
Weeks: 18 – 2nd Semester
Grades: 9, 10, 11, and 12
Credit: 0.5

Keyboard Lab II is a continuation of Keyboard Lab I advancing keyboard skills and performing duets and small ensemble pieces. Students will learn scales, chords, and how to use the computer to create their own songs and enhance songs that they have learned. Students must provide their own headphones.

Prerequisites: A grade of “C” or better in Keyboard I, or audition.

0750
CONCERT CHOIR
Weeks: 36
Grade: 9, 10, 11, and 12
Credit: 1

This is a performing Choir whose members will perform on several occasions, including holiday and spring concerts. After-school rehearsals and performances are required.

Prerequisite: None

0755
CHAMBER CHOIR
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

Chamber Choir is an upper-level course designed for students who will perform periodically for a variety of functions as well as in the holiday and spring concerts. After-school rehearsals are required.

Prerequisites: Concert Choir I, audition, and Music teacher recommendation.

0760
MUSIC TECHNOLOGY I
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5
Maximum of 16 seats available

Music Technology I is a course for any student in grades 9-12. Students will discover and explore introductory concepts used in music sequencing, notation, and recording. No prior musical experience is needed; however, having training on an instrument or voice is helpful. Students will create music using sequencing/editing software, synthesizers, and drum machines. Students interested in the current methods of music creation and production should consider taking this course.

Prerequisite: None

0765
MUSIC TECHNOLOGY II
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5
Maximum of 16 seats available

Music Technology II is a course for any students who have successfully completed the course work in Music Technology I. This course reinforces MIDI recording and editing techniques learned in Music Technology I while adding audio recording and mixing techniques into the class projects. Topics covered include mixing, equalization, effects, and final mixdown of tracks to a finished product. Students interested in music education, music performance, or music technology should consider this course.

Prerequisite: 80% in Music Technology I

0770
MUSIC IN POP CULTURE
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: 0.5

This course explores the history of pop and rock music, emphasizing primarily the period between 1950 to present day. Discussion, listening, and reading will focus on identifying a variety of rock-music styles within the historical context of the development, transformation, and interaction of pop styles. Student evaluation is achieved through class participation, quizzes, assignments, midterm, and final.

Prerequisite: None

0775
UKULELE CLASS
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: .5

Each Student will realize that they can be a ukulele player. This course serves as an introduction to the instrument and will provide students with instant access to making music on the ukulele. Focus points will be strumming and rhythms, reading music, improvising, and beginning songwriting.

Prerequisite: None

0780
GUITAR 1
Weeks: 18
Grades: 9, 10, 11, and 12
Credit: .5

This one-year course is designed for students with no previous guitar experience. Students will receive guidance and direction in solving problems related to playing the guitar at a beginning level and will learn many of the different styles, skills, and techniques required to become a successful guitarist. Areas of concentration include; correct posture, note reading, aural skills, flat-picking, singing songs, rhythmic patterns, chord study, finger-picking styles, musical forms, and improvisation and performing experiences. Prerequisite: None

1420
STAGE CREW
Weeks: 36
Grade: 10, 11, 12
Credit: 1

This course will provide students the opportunity to explore theatrical technology. The first semester will focus on the skills needed to carry out the six primary responsibilities of technical theatre, including costumes, props, lighting, sound, stage management, and scenery. During the second semester, students will apply those skills and have the opportunity to participate in the high school musical. Throughout the school year, stage crew will support and provide production staff for all events that take place in the AAHS Auditorium, including general maintenance of auditorium equipment.

Prerequisite: Approval of the Music Department Sponsor

READING

1645 OR 1647

9TH & 10TH GRADE READING

Weeks: 36

Credit: 1

This course includes reading instruction in the areas of fluency and comprehension. Instruction will focus on learning content related to reading words accurately and fluently, incorporating vocabulary strategies to comprehend and addressing the necessary critical thinking skills to understand content information at high levels by connecting reading and writing. Learning activities will focus on making inferences, identifying main ideas, summarizing text, differentiating between fact and opinion, determining the author's purpose, analyzing literary elements, recognizing bias and propaganda, and utilizing graphics, charts, and diagrams as methods to increase comprehension. Material will be presented using Keystone format as a guide through traditional, technological, and performance-based learning activities. Data-based research incorporating PA standards will drive instruction.

Prerequisites: MUST HAVE AN IEP

1648 OR 1649

11TH & 12TH GRADE READING

Weeks: 36

Credit: 1

This course includes remediation in the areas of fluency and comprehension. Instruction will focus on the remediation of oral reading to increase fluency and incorporate vocabulary strategies to increase fluency and comprehension. Learning activities will focus on making inferences, identifying main ideas, summarizing text, differentiating between fact and opinion, determining the author's purpose, analyzing literary elements, recognizing bias and propaganda, and utilizing graphics, charts, and diagrams as methods to increase comprehension. Material will be presented using Keystone format as a guide through traditional, technological, and performance-based learning activities. Data-based research incorporating PA standards will drive instruction.

Prerequisites: MUST HAVE AN IEP

LEARNING SUPPORT – Students must speak with their Individual Education Instructor

1600 English I – Grade 9

1605 English II – Grade 10

1610 English III – Grade 11

1615 English IV – Grade 12

1780 Study Seminar (9-12)

SCIENCE

All 8th grade students will take a placement test to determine their enrollment in Life Science, Biology, or Honors Biology for 9th grade:

0905
BIOLOGY
Weeks: 36
Grades: 9, 10
Credit: 1

Basic biological principles will be examined during the course of the year with particular attention to the scientific method, the cell, the chemical basis for life, genetics, biological evolution, and ecology. Emphasis will be placed on relating the course to everyday life through various laboratory experiences and investigations. Students will take the Keystone Exam at the end of the course.

Prerequisite: Placement determined by results of 8th grade placement test.

0910
HONORS BIOLOGY
Weeks: 36
Grade: 9
Credit: 1

Ninth grade Honors Biology is a higher level survey of all major biological topics, including scientific method and reasoning, the cell, biochemistry, ecology, genetics, and evolution. The main objectives of this course are: 1) to master the fundamental facts and concepts of biology, 2) to prepare for the Biology Keystone Exam to be taken at the conclusion of this course, 3) develop an appreciation for living things and their environment, 4) to learn laboratory skills and utilize the scientific method of problem-solving, 5) to develop good study strategies, critical thinking, and higher reasoning skills, 6) to integrate technology and research methods into the course content, and 7) to promote organizational skills and student responsibility for success at the high school and college levels. Laboratory and computer work is a major component of the class grade.

Prerequisite: Placement determined by results of 8th grade placement test.

0915
LIFE SCIENCE
Weeks: 36
Grade: 9
Credit: 1

This course is a general survey of the major biological topics in life science including the scientific method, the cell, genetics, evolution, and ecology. Emphasis is placed on relating these topics to student experience and everyday life. The main objectives of this course are: 1) to master the fundamental facts and concepts of life science, 2) to develop an appreciation for living things and their environment, 3) to learn laboratory skills and utilize the scientific method of problem solving, 4) to improve reading comprehension, 5) to improve study strategies and critical thinking skills, and 6) to promote organizational skills and student responsibility for continued success at the high school level. The course grade is based on textbook-based written work, quizzes and tests, lab work, class discussion and participation.

Prerequisite: Placement determined by results of 8th grade placement test.

RESTRICTION: Any student who has taken Biology, Chemistry, or Physics may **NOT** take this course.

0920
PHYSICAL SCIENCE
Weeks: 36
Grade: 11
Credit: 1

This course offers an integrated and coordinated science experience for the student by carefully sequencing the content from all physical science disciplines. The students' own life experiences will be used to engage them and to challenge their preconceptions. Students will develop experience in observing phenomena, manipulating materials, collecting and analyzing data and using scientific inquiry.

Prerequisite: Must have successfully completed Life Science and Biology

RESTRICTION: Any student who has taken Chemistry or Physics may **NOT** take this course.

0925
ANATOMY AND PHYSIOLOGY
Weeks: 36
Grades: 11, and 12
Credit: 1

The study of anatomy and physiology provides an essential background for those students pursuing a career in the field of biology, nursing, physical therapy, medicine, medical technician, and other related fields. The body of knowledge is both large and complex, with the need to know and understand a multitude of structures and functions. There is also personal relevance for the study of Anatomy and Physiology to gain a better understanding of disease and wellness. Using a variety of techniques, students will study basic body structure, cytology, histology, embryology, and most of the body systems. Labs will be an integral part of the course. Prerequisite: A 70% or better in Chemistry OR concurrent with Honors Chemistry AND teacher approval.

0930
CHEMISTRY
Weeks: 36
Grades: 10, 11, and 12
Credit: 1

This course is an introduction to Chemistry meeting minimum requirements for graduation. Topics covered are conversion factors using the metric system, significant figures, atomic structure, identifying matter, and its properties, using the periodic table, types of compounds, and chemical reactions and equations. Prerequisite: A 70% or better in Biology I AND Algebra I or teacher recommendation.

0935
HONORS CHEMISTRY
Weeks: 36
Grade: 10
Credit: 1

This is an introduction to Chemistry. Topics covered will be dimensional analysis using the metric system, history of atomic theory, identifying matter and its properties, the periodic table, elements and compounds, chemical reactions, stoichiometry, kinetic theory, chemical bonding, and the chemistry of acids or bases and salts added. Projects and laboratory activities will be emphasized to the maximum. Prerequisite: An 85% or better in Biology AND Algebra I or teacher recommendation.

0940
ADVANCED CHEMISTRY WITH COLLEGE IN HIGH SCHOOL OPTION
Weeks: 36
Grades: 11, and 12
Credit: 1

A continuation of Chemistry for those going to college and intending to major in any science, engineering, medicine, dentistry, pharmacy, or nursing, and therefore desiring a more complete knowledge of Chemistry. Students taking Advanced Chemistry may also participate in the College in High School Program. Students taking C.H.S. Chemistry will pay \$300.00 to the University of Pittsburgh and participate in various laboratory exercises at the university. Upon successful completion of the course, they will be awarded four credits in college chemistry, which are transferable to most colleges/universities they choose to attend. Prerequisite: An 80% or better in Chemistry AND approval of the Chemistry teacher.

0945
BIOTECHNOLOGY
Weeks: 18
Grade: 10, 11 and 12
Credit: .5

Biotechnology is the exploitation and investigation of biological processes for industrial and other purposes that may enhance the way humans are able to interact with the natural world. This type of technological problem solving is regularly used in medicine, health care, energy consumption, conservation, and agriculture, among many other fields of study. The intention of this class is to introduce

students to investigations in which biological concepts are identified and can then be innovated or enhanced by using various types of technology, from using computer systems to collect and analyze data to designing and constructing systems to provide solutions to biological problems. The class will be based on participation in hands-on, inquiry-based learning modules. Proper laboratory and safety procedures will be strictly enforced. Students will also be given opportunities to examine various career choices within the realm of biotechnology. Topics of information: Physical Enhancements for Human Health Care, Electrocardiogram, Forensic Science, Genetic Engineering, Aquaponics, Hydroponics, Pollution Management, and Waste Management. The class is proposed as a semester course and divided by separating the course into two sections: Biotechnology – Biomedical Topics (covering the first several topics based on human health innovations) and Biotechnology – Environmental Topics (covering the second part of the list dealing with environmental concerns.)

Prerequisites: A 75% or higher in Biology AND willing to work independently or in small groups on inquiry based activities.

0950

PHYSICS 1

Weeks: 36

Grades: 11, and 12

Credit: 1

Students will take **either** Physics 1 **OR** AP Physics 1. This course stresses the mathematical and conceptual development of Mechanics topics and touches upon the topics of electricity, waves, and sound. Mathematical problem-solving, including algebraic manipulation, systems of equations, trigonometric functions, and graphical analysis, are used extensively. Laboratory exercises are included to enhance the development of concepts and data analysis techniques.

Prerequisite: An 80% or better in Algebra II and Geometry **AND** at least a 70% in Chemistry I.

0955

ADVANCED PLACEMENT PHYSICS 1

Weeks: 36

Grades: 10, 11, and 12

Credit: 1

This course is designed to meet the demands of the AP Physics 1 syllabus as published by the College Board. The topics covered include Classical Mechanics, Waves and Sound, and an introduction to Electric Circuits. This course is equivalent to a one-semester terminal physics course at the college level. The course is valuable to the student in two ways. The experience of having taken a college-level science class in high school will be a tremendous help when the student is in college. Secondly, the student can earn college credit by taking the AP Physics 1 exam at the end of the year. This of course depends upon how well the student does on the exam and the college and major in which the student enrolls. Please contact the specific college or university for more information. Mathematics, including trigonometry, geometry, and algebra will be used extensively in this course to solve problems and develop relationships between physical quantities. This course meets 7 ½ periods each week.

Prerequisite: At least an 85% in Algebra II and Geometry **AND** concurrent enrollment in Pre-Calculus, **WITH** teacher recommendation.

0960

ADVANCED PLACEMENT PHYSICS 2

Weeks: 36

Grades: 11, and 12

Credit: 1

This course is designed to meet the demands of the AP Physics 2 syllabus as published by the College Board. The topics covered include Thermodynamics, Fluid Dynamics, Electricity and Magnetism, Light and Sound, and Topics in Modern Physics. A large number of objectives for the course and the highly analytical nature of problem-solving make it very demanding. This course is equivalent to a second-semester terminal physics course at the college level. A student can earn college credit by taking the AP Physics 2 exam at the end of the year. This of course, depends upon how well the student does on the exam and the college and major in which the student enrolls. Please contact the specific college or university for more information. Mathematics, including Trigonometry, Geometry, and Algebra will be used extensively in this course to solve problems and develop relationships between physical quantities. This course meets 7 1/2 periods each week.

Prerequisite: At least an 80% in AP Physics I **WITH** Science teacher recommendation

0965

ADVANCED PLACEMENT PHYSICS C: MECHANICS

Weeks: 36

Grades: 12

Credit: 1

This calculus based Physics course is designed to meet the demands of the AP Physics C: Mechanics syllabus as published by the College Board. The Physics C: Mechanics course is equivalent to a one-semester, calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.

Prerequisites: At least an 80% in AP Physics 1, AP Physics 2, and AP Calculus AB **WITH** Science teacher recommendation.

1965

ADVANCED PLACEMENT PHYSICS C: ELECTRICITY AND MAGNETISM

Weeks: 36

Grades: 12

Credit: 1

This calculus-based Physics course is designed to meet the demands of the AP Physics C: Electricity and Magnetism syllabus as published by the College Board. The Physics C: Mechanics course is equivalent to a one-semester, calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics, conductors, capacitors and dielectrics, electric circuits, magnetic fields, and electromagnetism. Introductory differential and integral calculus is used throughout the course.

Prerequisites: At least an 80% in AP Physics 1, AP Physics 2, AP Physics C: Mechanics, and AP Calculus AB **WITH** Science teacher recommendation

965

EARTH AND SPACE SCIENCE

Weeks: 36

Grades: 10, 11

Credit: 1

Earth Science is a course emphasizing the Earth, its environment, and its place in the universe. Textbooks, laboratory activities, and audio-visual equipment are integrated into a carefully planned sequence in which the students are encouraged to observe, interpret and discuss the problems at hand. This course is divided into two parts: a half year emphasis is on Astronomy, Oceanography, and Meteorology, and a half year emphasis is on Geology. Students must successfully complete both parts for one credit.

Prerequisite: None

RESTRICTION: Any student who has taken Chemistry or Physics may **NOT** take this course.

0970

GEOLOGY

Weeks: 36

Grades: 11, and 12

Credit: 1

The course is designed for students who wish to pursue a career in the field of geo-science. Advanced students with little knowledge of the planet Earth may wish to take this class to round out their science education. This course uses a college textbook, Essentials of Geology, as the foundation of the class. Students will be given carefully planned lectures in the classroom and be tested on these lectures via traditional essay tests and from questions taken from the text. The course will include units on earth materials and processes. Activities in the class include a variety of laboratories.

Prerequisite: At least a 70% in one of the following courses: Chemistry, Physics, And Environment & Ecology.

0980

ADVANCED PLACEMENT BIOLOGY

Weeks: 36

Grade: 12

Credits: 1

The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by science majors during the freshmen year. The course meets 7 1/2 periods per week. Topics to be covered include molecules and cells, heredity and evolution, and organisms and populations. During this double-period, laboratory-based course, students will be expected to read college-level texts independently, think and write critically, take thorough notes from readings, discussions and

lectures, express understanding of the unifying themes and concepts of biology and complete 13 college-level laboratory investigations. The course grade will be based on written laboratory activities, individual and group projects, homework assignments, quizzes, tests and class participation in discussion and critical thinking activities. Preparing students for the AP Biology Exam in May is a major focus of the class. Course examinations are designed to (1) prepare students for college-level exams, and (2) replicate the AP Exam.

Prerequisite: At least an 80% in Biology I and Chemistry, and the recommendation of a Science teacher.

0985

ORGANIC CHEMISTRY

Weeks: 18

Grade: 11, and 12

Credits: 0.5

Organic chemistry is the chemistry of compounds containing carbon. It is a qualitative science course that is designed to prepare you for further scientific study. The topics discussed are the structural features of organic molecules, nomenclature of organic molecules, a few important chemical substitution reactions, organic compounds such as alkanes, alkenes and alkynes, a molecule's functional group, including those for alcohols, carboxylic acids, ethers, esters, aldehydes, and ketones, as well as physical property differences in a class of organic compounds based on their molecular structure.

Prerequisite: An 80% or better in Chemistry and teacher recommendation.

0990

ADVANCED PLACEMENT CHEMISTRY

Weeks: 36

Grades: 11, 12

Credits: 1

The AP Chemistry course provides students with a college-level foundation to support future advanced course work in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations as they explore topics such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Created by the AP Chemistry Development Committee, the course curriculum is compatible with many Chemistry courses in colleges and universities. Students will take the AP Chemistry test in May, which can earn them college credit based on their score.

Prerequisite: 80% or better in Chemistry I or Honors Chemistry I and teacher recommendation.

0995

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

Weeks: 36

Grade: 11, 12 or 10 w/Teacher Recommendation

Credits: 1

AP Environmental Science is designed to educate students about the interrelationships of the natural world around them. It stresses the critical importance of environmental issues that impact our daily lives, focusing strongly on a systems approach of studying the material. Students will apply science as a process to environmental concepts, understand energy conversions which underlie all ecological processes, express their understanding of the Earth being an interconnected system, discuss how humans are altering the Earth whether for the betterment or detriment of a sustainable future, and most importantly how human survival will depend on being able to develop the practices that will achieve sustainable systems. AP Environmental Science is an interdisciplinary course, incorporating the fields of Biology, Chemistry, Physics, Earth Science, Geology, and Astronomy. Laboratory and field investigations will also be incorporated to internalize the concepts learned from the readings and class material and will account for at least 25 % of the class grade.

Prerequisite: 75% or better in Biology and Teacher recommendation or 75% or better in Chemistry or Algebra

1000

INTRODUCTION TO FORENSIC SCIENCE

Weeks: 36

Grades: 10, 11 and 12

Credits: 1

Introduction to Forensic Science, is an inquiry-based, hands on class that encourages the student's ability to become more proactive problem solvers. This course is designed to investigate various aspects of crime scene investigation, which encourage the students to implement and discover the possible career options involved with this type of scientific and technology based subject material. Topics of interest include Empirical Crime Scene investigation, including documentation, note taking, and scale drawing, Evidence Collection procedures, Types of Physical and Biological Evidence Collection and Testing (shoe prints, hair, fiber, etc.), Ballistics, Blood Spatter and Blood Typing, Fingerprint Collection and Identification, DNA Collection with Gel Electrophoresis Separation,

Toxicology, Odontology, and Anthropology. Students must be willing to work independently or in small groups to complete inquiry based lab activities, additional course work and research will also be required.

Prerequisite: Students must have successfully completed Biology with a 70% or higher, and have successfully completed Chemistry with a 70% or higher or be taking it concurrently.

1005

FORENSIC SCIENCE II

Weeks: 36

Grades: 11, 12

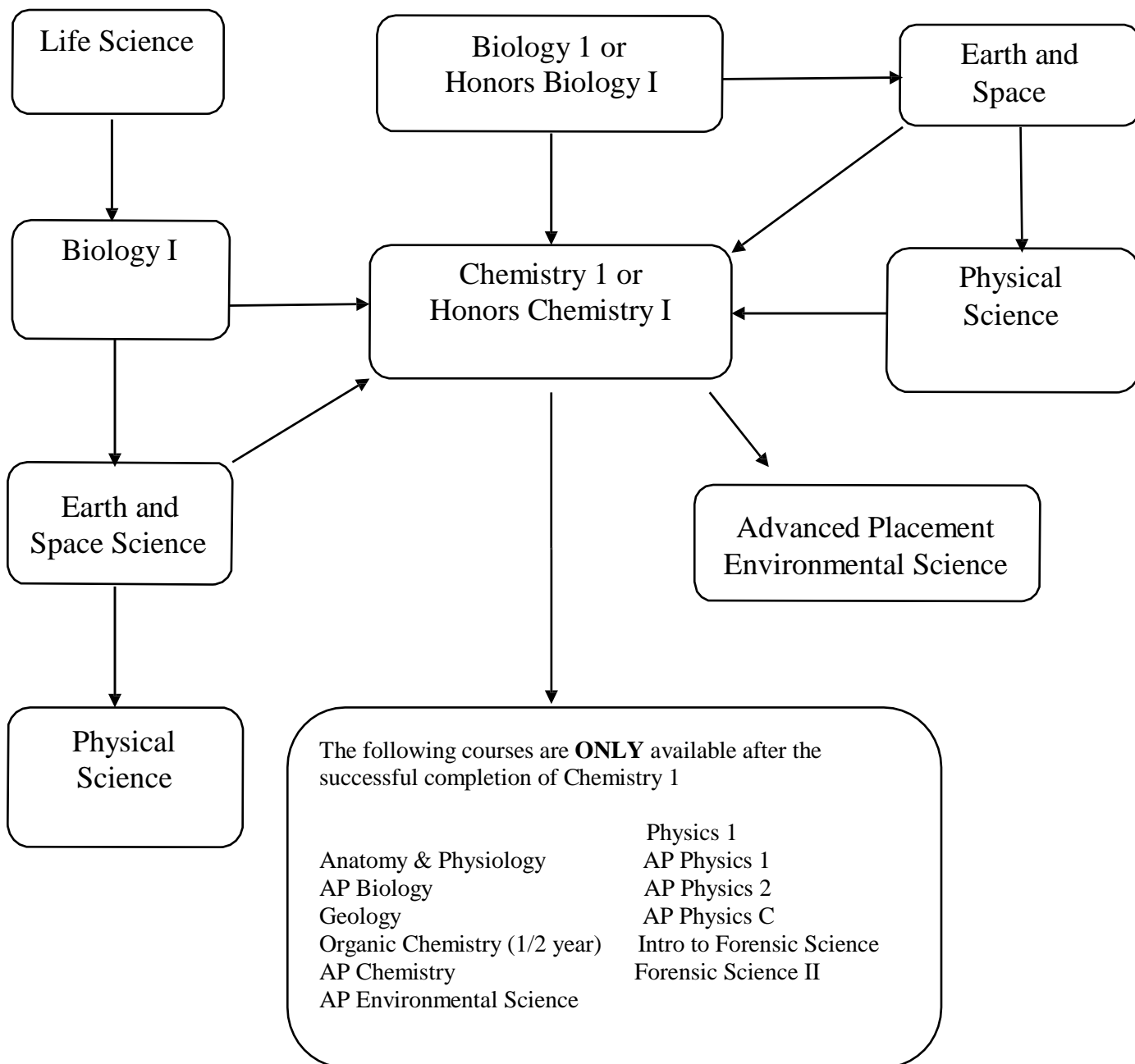
Credits: 1

Forensic Science II is a continuation of the topics introduced in the previous course. This course is designed to delve deeper into the various topics presented in the first course as well as introduce new topics as well. Topics of interest include Toxicology, fires and explosions, firearms and tool marks, impression evidence, digital evidence, as well as connecting with the legal and ethical aspects. Students must be willing to work independently or in small groups to complete inquiry based lab activities, additional course work and research will also be required.

Prerequisites: Students must have successfully completed Introduction to Forensic Science with a 70% or higher to be eligible for this course.

The following flowchart will aid you in selecting your science courses while attending Ambridge Area High School. Note that you **MUST** move from top to bottom and/or follow the arrows. Backward or upward movement will ruin the course flow and make student success significantly difficult. Please refer to the Course Selection Book for prerequisites.

Most students will start at the Biology I course. Students that do not start 9th grade taking Biology will start with the Life Science course.



SOCIAL STUDIES

All students are required to take four Social Studies courses in order to graduate. They are American Cultures I, American Cultures II, World Cultures, and U.S. Government / Economics. In order to complete all Social Studies requirements, a student must complete one course from the course sequence each year. A student may NOT take two required Social Studies courses in one year.

1200

AMERICAN CULTURES I

Weeks: 36

Grade: 9

Credit: 1

This course is intended to give the student a picture of American culture and ideals from the Pre-Colonial Age to the end of the 19th Century. It is intended to make the student aware of the problems that occurred in the early days of history, as well as precedents set during this era, and give the student a broad background for American Cultures II.

Prerequisite: None

1205

AMERICAN CULTURES II

Weeks: 36

Grade: 10

Credit: 1

This course covers the period of American History from reconstruction to the present. By tracing the major political, social, cultural, economic, and military events of the U.S. from the late 19th Century to the present, it is hoped the student will gain an awareness of the forces and factors, which have shaped present-day America. It is further hoped that the mistakes and problems of the past can help the students make decisions in a democratic society, which will have solid backing by our true heritage. A variety of techniques and procedures are used to make this course interesting and educational. Students will be expected to analyze primary and secondary sources, interpret political cartoons, graphs, and read multiple perspectives on American themes.

Prerequisite: None

1210

WORLD CULTURES

Weeks: 36

Grade: 11

Credit: 1

From early civilization to modern times, students will have an opportunity to compare developments taking place simultaneously among various peoples of the world. Students will compare and contrast differences in social and political institutions, levels of literacy and technology, ethical and religious ideas, history, geography, and economic development. Students will be prepared to evaluate how the politics of one society have affected other societies.

Prerequisite: None

1215

U.S. GOVERNMENT / ECONOMICS

OR

1260

HONORS U.S. GOVERNMENT / ECONOMICS (Dual Enrollment Pending Cooperative Agreement)

Weeks: 18 each section

Grade: 12

Credit: 0.5 each section

U.S. Government is an examination of the social, economic, and political problems affecting Americans in their everyday lives. The basic approach to the course is the problem-solving method. Using this approach, the students research the actual growth and development of the United States Constitution and its ramifications upon the government and the citizenry of the United States.

The Economics portion of this course is designed to cultivate the student's economic sense by expanding on their neglected area of social studies. Economic theory is introduced only to the extent necessary to explain the basis of our free economy upon which this country has been built, and within which he/she lives and will earn a living. This course also explores broader economic problems. Sections dealing with money management, banking, credit, debt, and investing will also be covered.

HONORS U.S. GOVERNMENT /ECON Prerequisite: 90% average in regular Social Studies classes and/or 88% in Honors Social Studies classes.

1220

ADVANCED PLACEMENT PSYCHOLOGY (AP)

Weeks: 36

Grade: 12

Credit: 1

Psychology is a survey course dealing with the many areas of psychology, including human development, personality learning, and abnormal behavior. The course is structured to give an insight into many areas rather than a concentration on any one particular area. This course will be the equivalent of an Introduction to Psychology. Students will prepare for and strongly be encouraged to take the AP Exam. This is an elective course and will not satisfy towards a Social Studies credit.

Prerequisite: At least an 88% overall average in Social Studies and a Social Studies teacher recommendation.

1225

HONORS AMERICAN CULTURES I

Weeks: 36

Grade: 9

Credit: 1

This course is designed to give the student a broad picture of the development of American culture and to allow the student to concentrate on the study of thematic topics in our history such as: federalism, the growth of political parties and the western movement. Note-taking, library research, oral presentation skills, and group work are emphasized. Essay tests are given. The course content starts with the Revolutionary War and runs to the end of the 19th Century.

Prerequisite: 90% average in regular Social Studies classes and/or 88% in Honors Social Studies classes.

1230

HONORS AMERICAN CULTURES II

Weeks: 36

Grade: 10

Credit: 1

This course begins with the Progressive era of American history and includes the entire twentieth century. It is meant to be a chronological study of important events of the century as well as a look at the development of thematic topics such as America's War. Note-taking, research, presentation, collaboration, and literacy skills are emphasized. Students will be expected to utilize historical and critical thinking skills to analyze primary sources. All tests include essay questions.

Prerequisite: 90% average in regular Social Studies classes and/or 88% in Honors Social Studies classes and teacher recommendation.

1235

HONORS WORLD CULTURES

Weeks: 36

Grade: 11

Credit: 1

This course is designed to help students fully understand the realities of the world and the global problems of the present and the future. From early civilization to modern times, students will have an opportunity to compare developments taking place simultaneously among various peoples of the world. Students will compare and contrast differences in social and political institutions, levels of literacy and technology, ethical and religious ideas, history, geography, and economic development. Students will be prepared to evaluate how the politics of one society have affected other societies.

Prerequisite: 90% average in regular Social Studies classes and/or 88% in Honors Social Studies classes and teacher recommendation

1240

CONTEMPORARY ISSUES

Weeks: 18

Grades: 11, and 12

Credit: 0.5

The Contemporary Issues course will be an investigative study of local, regional, state, world, and international issues. A variety of issues and topics will be researched and discussed. Instruction will involve various book excerpts, magazine and newspaper articles, videos, creative writing and artwork. A variety of issues and topics will be discussed and researched. These issues involve racial discrimination, segregation, affirmative action, perception gaps, hate crimes, and stereotyping. The class will also use films like Crash, American History X, and Schindler's List to reinforce discussion. Analytical and writing skills will be emphasized and developed. Students will take each course for nine weeks. Class participation is essential in both classes.

Prerequisite: At least a 75% average in a previously taken Social Studies class and teacher recommendation.

1245

HISTORY THROUGH THE EYE OF THE LENS

Weeks: 18

Grades: 11, and 12

Credit: 0.5

This course will focus on the relationship between movies and history while stimulating media awareness and critical viewing skills, as well as analyzing and interpreting historical events through feature films. A number of questions will be addressed. These include: What is the content of the film? What information does it convey or portray? How is the information affected or determined by the necessity to entertain as well as inform? What influences were at work during the production of the film? How was the film received when released? Is the film historically accurate? Lastly, the course will cover all of the major themes of United States history, and a variety of films will be used, including black and white, silent, animated, and color. Analytical and writing skills will be emphasized and developed.

Prerequisite: None

1250

ADVANCED PLACEMENT EUROPEAN HISTORY

Weeks: 36

Grade: 11

Credit: 1

This is a full-year advanced course equivalent to a Western Civilization survey course found in college. AP European History will survey period 1300 – Present-day so that the student will understand the economic, political, social, and intellectual changes in European History. Students will learn to analyze historical materials, their relevance to a given interpretive problem, their reliability, and their importance to weigh the evidence and interpretations presented in historical scholarship. The Advanced Placement exam will be given in May. This course will supplant World Cultures.

Prerequisite: A grade of 90% or higher in regular Social Studies classes and/or 88% in Honors Social Studies classes.

1265

AUTO THEORY

Weeks: 18

Grades: 10, 11, and 12

Credit: 0.5

Focus on PA laws and regulation, vehicle operations, perceptual skills, decision-making, and risk reduction, driving conditions, and influences upon drivers.

Prerequisite: None

1270

LAW & SOCIETY

Weeks: 18

Grades: 9, 10, 11 and 12

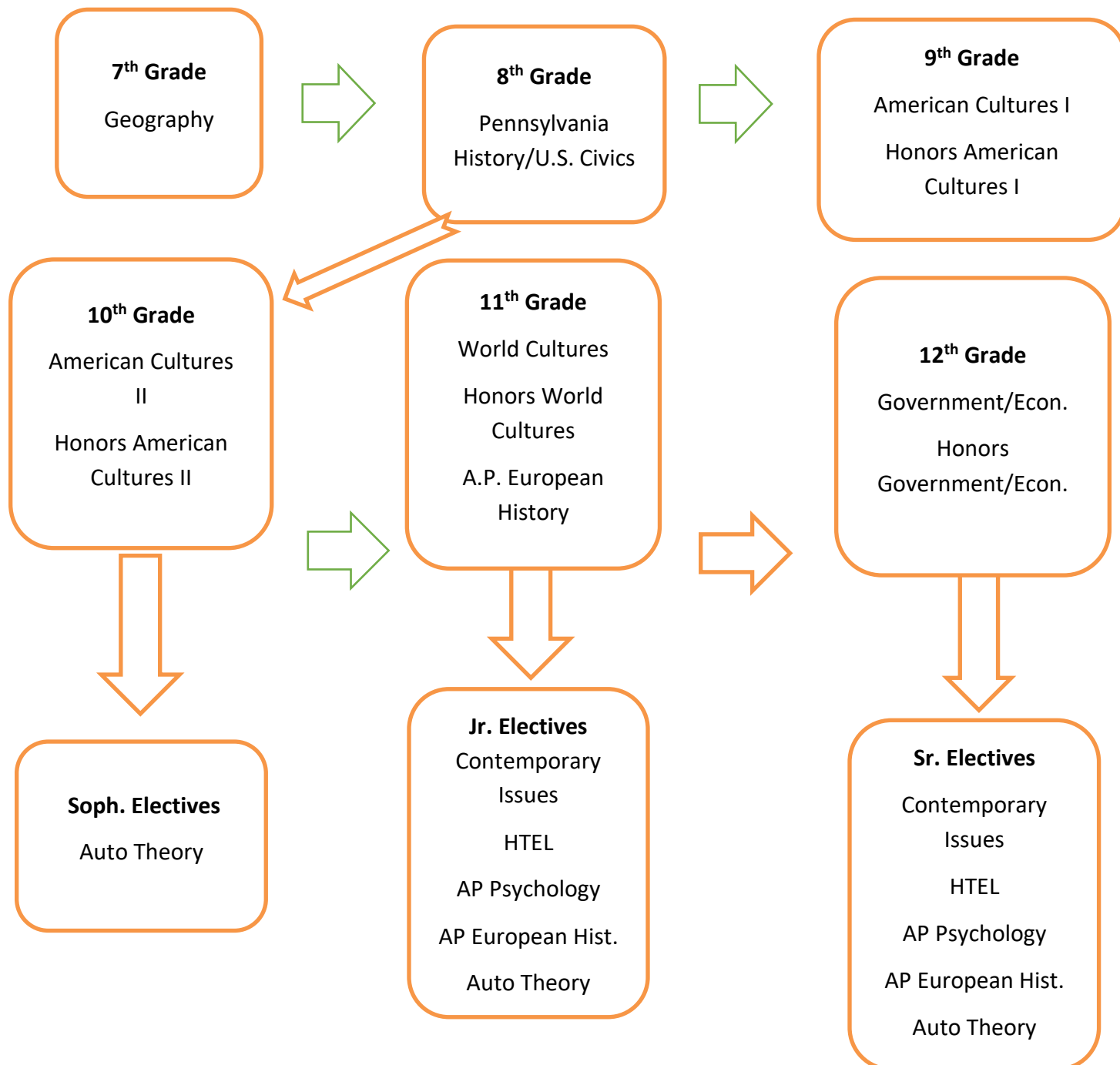
Credit: 0.5

This course will focus on the individual rights and responsibilities provided for by the United States Constitution. Students will also examine the relationship between the individual citizen and the laws that govern our society. Topics of study include: human rights, the criminal and civil justice system, mock trial/mediations, and the ability to participate effectively as a citizen in our nation.

1275
 SOCIOLOGY
 Weeks: 18 Weeks
 Grades: 11, 12
 Credit: 0.5

This course is designed to provide the student with an understanding of how societies function and how individuals behave within a social context. Topics of study include: social norms, values, social grouping, racism and prejudice, crime, and old age.

Ambridge Area School District Social Studies Flow Chart/Progression of Classes



SPECIAL EDUCATION

Ambridge Area High School provides programs for the following categories of exceptional students: **Educationally Mentally Handicapped (EH), Learning Disabled (LD), Gifted (see GATE/Gifted), Speech and Language Impaired, and Vision and Hearing Support, Emotional Support and Life Skills Support.**

Learning Support students are encouraged to enroll in as many regular classes as possible. The courses to be taken are determined at the annual Individualized Educational Program (IEP) conference with input from the student, parents, teachers, and a school psychologist.

Learning Support Assistants now work within many regular education classrooms to provide assistance for any students experiencing difficulty. In conjunction with the regular education teachers, they adapt curricula, modify tests, and provide remediation. The primary focus is to provide a positive learning experience for all students.

Students whose special needs cannot be met with the regular education program are assigned to Learning Support classes, which have been deemed appropriate following the Multi-Disciplinary Team Evaluation and IEP conference.

Learning Support Programs provide academic support to L.D., E.M.H. students and Life Skills Students. These students receive assistance with their regular education courses as well as direct instruction. The IEP directs the focus of the assistance. Inclusion is practiced as much as possible. Classes are team-taught by a regular education teacher and a special education teacher. Having students succeed in higher-level environments when possible, with the proper assistance, makes for a better, more well-rounded student. Currently, inclusion classes are offered in all subject areas.

The Emotional Support Program is geared toward students whose behavior requires smaller, more structured classes. This allows intense supportive assistance for academics.

None of these programs can be scheduled unless a student has an IEP. For more information, parents are encouraged to contact the Special Education Office at the High School. The telephone number is (724) 266-2833.

Speech and Language Support Program

Students experiencing communications disorders of impaired language, voice, fluency, or articulation to such a degree the academic success is affected are provided with speech and language support.

Vision and Hearing Support Program

Students requiring vision or hearing support are provided with these services through the Beaver Valley Intermediate Unit #27.

Students will be scheduled for a transition course entitled Professional and Career Development in grades 9 and 10. This semester offering will help students make choices on careers while in high school and beyond. This will be discussed during the writing of the IEP.

TECHNOLOGY EDUCATION /APPLIED ENGINEERING

The **Technology Education and Applied Engineering Department** is part of the general education program that offers experiences in exploring, applying, and creating with technology. Our classes include topics such in Bio-Technology, Communications, Engineering, Production (Manufacturing and Construction), and Transportation (Power and Energy) with learning activities that align with Science, Technology, Engineering, and Math (STEM) standards. All students will safely use materials, tools, and processes of the major technologies, which are applied in economic and civic life through the hands-on activities offered in each class.

Our department offers several clubs that allow students to expand their skills in a variety of interests: TSA, Production Tech, and Video Production.

Successful completion of **Applied Technical Design or Manufacturing Technology I**, qualifies students to further elect a wide variety of courses within our department and explore specialized areas of technology and/or join the Technology Student Association (TSA).

Whether you are college-bound, thinking about a technical school or the armed services, plan to study a specialty at the Beaver County CTC, or are directly going to find a job upon graduation, our technology education/applied engineering department has something to offer.

Note: Payment for materials used will be referred to school policy.

1300
APPLIED TECHNICAL DESIGN w/CADD
Weeks: 36
Grades: 9, 10, 11, 12
Credit: 1
Student will have the option to earn 3 credits from Pittsburgh Technical College for successful completion of this course. Learn the fundamentals of drafting, design, problem solving, and calibration. In the process, learn how to take your ideas and turn them into something that others can see and expand on. The skills taught in this class apply to anyone who has a desire to create, innovate, or inspire. From Engineers to Carpenters, Architects to Graphic Designers, Pharmacists to Roboticists this class has something for anyone who wants to DO.
Prerequisites: None

1305
MANUFACTURING TECHNOLOGY
I Weeks: 36
Grades: 9, 10, 11, 12
Credit: 1

The students will safely use hand tools and basic machine operating practices as employed in various phases of woodworking. Projects will be manufactured to acquaint the students with materials, processes, and machines used in industry. Evaluation will be based upon completion of projects, quizzes and teacher observation. **NOTE: Students will calculate their individual project costs based on set pricing for board/ft. Payment is required to take projects home.**
Prerequisites: None

1395
VIDEO PRODUCTION I
Weeks: 18
Grades: 9, 10, 11, 12
Credit: 0.5

This course will allow you to explore the communications field of video production. In this hands-on course, you will learn how to operate video equipment and software, plan out a production, and create final products to share with others. Students will learn to use Adobe, Premiere, Microsoft Photos and OBS. Camera basics, shooting techniques, digital (non-linear) editing, and TV studio concepts will be covered. Projects include: PSA, Commercials, Animations, and Claymation. TSA competitions are possible.
Prerequisites: None

1345
GRAPHICS DESIGN
Weeks: 18
Grades: 9, 10, 11, 12
Credit: 0.5

This course is a hands-on introduction to the world of graphics and media arts. Activities allow you to design and create T-shirts, Mugs and calendars. Projects will focus on learning the art of Sublimation, Heat Press, 3 color press and airbrush design. Students will learn to use Adobe Photoshop. This course allows the student to become an active member of TSA and the Production Tech Club. ***Note: Most materials will be provided, but you may need to purchase t-shirts and other materials based on your project needs.**

Prerequisites: None

TECHNOLOGY EDUCATION: ENGINEERING

1310
ARCHITECTURE I
Weeks: 36
Grades: 10, 11, 12
Credit: 1

Students will explore the methods and techniques used in designing architectural residences both technically and aesthetically with the use of a wide variety of media. Once a final working design has been completed, a floor plan, basement plan, elevations, cross-sectional view, plot plan, and a two-point perspective of the exterior will be drawn with AutoCAD Architectural REVIT. This complete set of working drawings is used to build a model. Evaluation will be based upon successful completion of the set of drawings and model, quizzes, and teacher observation.

Prerequisites: A grade of 80% or higher in Applied Technical Design and teacher approval.

1315
ARCHITECTURE II
Weeks: 36
Grades: 11, 12
Credit: 1

Students will further explore the methods and techniques used in designing architectural residences and commercial buildings. The design and layout of each individual room of a residence will include a plan, elevation, and perspective drawing with emphasis upon interior design. This emphasis will be in the form of a presentation-type design drawing. Extensive detail drawings will include special sectional views and some framing plans. Major emphasis will be based upon the completion of student-generated design to include its working presentation drawings accompanied with a model. Students will incorporate the use of AutoCAD Architectural REVIT. Evaluation will be based upon successful completion of the set of drawings and models, quizzes, and teacher observation.

Prerequisites: Architecture I and teacher approval

1330
ENGINEERING DESIGN I
Weeks: 36
Grades: 10, 11, 12
Credit: 1

This course is designed to prepare students for technical and professional post-graduate fields of study. Students will experience layout and design of several facets of engineering drawings ranging from the most simplified to complex technical drawings. Strong emphasis is placed on student research. Student evaluation will be based upon successful completion of quizzes, tests, research, assigned drawings and completed log entries.

Prerequisites: Applied Technical Design or Manufacturing I

1402

HONORS TECHNOLOGY I

Weeks: 36

Grades: 10, 11, 12

Credit: 1

This course is designed to challenge technology education students in the areas of applied engineering and Science, Technology, Engineering and Math (STEM) integration to include: structural engineering, transportation technology, power technology, manufacturing technology and communication technology. "Hands-on" problem-solving Technology Learning Activities (TLA's) will be presented for solutions by individual, as well as small/large groups. Assessment will include successful completion of selected TLA's, re-designs, anecdotal records including debriefing log sheets, and oral presentations monitored by teacher observation. This is a weighted class. Students will have the opportunity to participate in the leadership training experience and the competitive events involved with the Pennsylvania Technology Student Association (PA-TSA).

Prerequisites: A grade of 90% or higher in App Tech, Manufacturing I or Engineering Design I AND teacher approval.

1405

HONORS TECHNOLOGY II

Weeks: 36

Grades: 12

Credit: 1

This course is designed to further challenge advanced technology education students in the areas of applied engineering and Science, Technology, Engineering and Math (STEM) integration. Students will problem-solve advanced TLA's. Advanced students will also Select technological activity areas of interest for independent study. A research and design problem-solving activity will be included. The teacher will approve topics. Students must submit a proposal, keep an anecdotal record, prepare a written report, and present an oral summary of their findings. Assessment will be based upon successful completion, administration, testing and evaluation of the proposed study and teacher observations. This is a weighted class.

Prerequisites: Honors Technology I and teacher approval.

0945

BIOTECHNOLOGY

Weeks: 18

Grade: 10, 11 and 12

Credit: .5

Biotechnology is the exploitation and investigation of biological processes for industrial and other purposes that may enhance the way humans are able to interact with the natural world. This type of technological problem solving is regularly used in medicine, health care, energy consumption, conservation, and agriculture, among many other fields of study. The intention of this class is to introduce students to investigations in which biological concepts are identified and can then be innovated or enhanced by using various types of technology, from using computer systems to collect and analyze data to designing and constructing systems to provide solutions to biological problems. The class will be based on participation in hands-on, inquiry based learning modules. Proper laboratory and safety procedures will be strictly enforced. Students will also be given opportunities to examine various career choices within the realm of biotechnology. Topics of information: Physical Enhancements for Human Health Care, Electrocardiography, Genetic Engineering, Agricultural Practice, Pollution Management and Waste Management. Biotechnology serves as an excellent exploratory class for students who are interested in a future science or technology career, but want to experience in order to help define a career path.

Prerequisites: A 75% or higher in Biology AND willing to work independently or in small groups on inquiry based activities.

TECHNOLOGY EDUCATION: MANUFACTURING

1360

MANUFACTURING TECHNOLOGY II

Weeks: 36

Grades: 10, 11, 12

Credit: 1

Students will explore advanced processes and machine tool operations in woodworking. Advanced projects are selected that meet the student's needs. Evaluation will be based upon successful completion of projects, quizzes, and teacher observation. **NOTE: Students will calculate their individual project costs based on set pricing for board/ft. Payment is required to take projects home.**

Prerequisites: Manufacturing Technology I and teacher approval.

1365
MANUFACTURING TECHNOLOGY III
Weeks: 36
Grades: 11, 12
Credit: 1

This is an advanced course to include the safe use of technical woodworking materials, tools, and processes with emphasis placed upon furniture design. Evaluation will be based upon successful completion of student-designed projects, quizzes, and teacher observation. **NOTE: Students will calculate their individual project costs based on set pricing for board/ft. Payment is required to take projects home.**

Prerequisites: Manufacturing Technology II and teacher approval

1303
MATERIAL FABRICATION
Weeks: 18
Grades: 10, 11, 12
Credit: 0.5

Students will explore basic techniques, methods, and processes used in manufacturing to change materials into parts to be combined into a finished product. Activities will include technical drawing interpretation, safe use of forming, separating, combining, and conditioning processes to construct finished products from mediums, including metals and plastics. Evaluation will include quizzes, exams, assessment of “hands-on” projects, process documentation, and teacher observation. **NOTE: LAB FEE**

Prerequisites: Applied Tech or Manufacturing I & Teacher Approval

1355
WELDING AND FABRICATION TECHNOLOGY
Weeks: 18
Grades: 11, 12
Credit: 0.5

Welding/Fabrication methods and terminology will be presented. Individuals will complete sheet metal and wrought iron projects that will utilize spot, gas, and electric welding methods. Hands-on activities will also include the foundry process. Students will be introduced to an overview of the Gas and Oil industry, including future job opportunities. Student evaluation will be based upon the successful completion of projects, assignments, along with exams and teacher observation. **NOTE: LAB FEE**

Prerequisites: Manufacturing Technology I, Material Fabrication and teacher approval.

1372
HOME REPAIR
Weeks: 18
Grades: 10, 11, 12
Credit: .5

In this course, students will learn common Home Repair and maintenance skills including but not limited to: changing lighting fixtures and outlets, replacing drain faucets, recaulking windows and sinks, water heater and HVAC maintenance and checking smoke and CO detection systems. The course will also include tips on basic DIY projects such as wall murals, installing vinyl or tile, painting and making shelves.

Prerequisite: Successful Completion of 1 other 1300 Elective.

TECHNOLOGY EDUCATION: DESIGN

1350
DIGITAL GRAPHICS DESIGN
Weeks: 18
Grades: 10, 11, 12
Credit: 0.5

This course allows the student to experience the digital side of media arts. Put to use the concepts of color theory, principles and elements of design, and photography in hands-on activities. These may include radio advertisements, commercials, web media, photography, print media, and of course--t-shirts. Students will learn to use Adobe Photoshop, Flash, and Illustrator.

Prerequisites: A grade of 80% or higher in Graphics Design/Teacher recommendation

1352

PRODUCTION GRAPHICS DESIGN

Weeks: 18

Grades: 10, 11, 12

Credit: 0.5

Students will use all the skills learned in prior graphics classes to complete in-depth and multifaceted projects on a variety of different medium. Use of the Heat press, Screen press, Laser Engraver, Vinyl cutter, and CNC Router will provide for high-quality production of finished products. ***NOTE: Some projects will require a small fee.**

Prerequisites: A grade of 80% or higher in Graphics Design/Teacher recommendation

1358

ROBOTICS

Weeks: 18

Grades: 10, 11, 12

Credit: .5

In this course, students will work individually and in teams to problem solve various challenges. Students will be encouraged to use problem solving and STEM concepts when engineering their robotic designs. The robots will be constructed from the popular LegoMindstorm NXT and VEX cortex platforms. Remote control and autonomous mode operations will be configured by using RobotC (C++) programming. Design concepts, structural integrity, and mechanical engineering will be researched and incorporated into designs. Students in this course will be encouraged to participate in local competitions, TSA, and the robotics club. No computer programming experience reqd.

Prerequisite: Successful Completion of 1 other 1300 Elective or Coding Class

1398

VIDEO PRODUCTION II

Weeks: 18

Grades: 10, 11, 12

Credit: 0.5

This course will build upon the student's skills and techniques from video production 1. Advanced video production techniques including but not limited to, animation, motion graphics, directing, and scriptwriting will be taught and practiced. Students will be able to use the studio for projects and will be required to film school events, cross-curricular projects, activities, and contribute media for AATV. TSA competitions are possible.

Prerequisites: A grade of 80% or higher in Video Production I and teacher approval.

????

FUNDAMENTALS OF CYBERSECURITY

Weeks: 18

Grades: 9, 10, 11, 12

Credit: 0.5

As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyberattacks. This course prepares students with crucial skills to be responsible citizens in a digital future. The Fundamentals of Cybersecurity course is designed for beginners to intermediate computer science students with at least some knowledge and interest in computer science. The course is highly visual, dynamic, and interactive, making it engaging for those new to computer science.

COURSE CODES BY DEPARTMENT

ART

0115 Art I – Beginning Studio Art
 0120 Art II – Intermediate Studio Art
 0125 Art III - Advanced Studio Art
 0130 Art IV
 0135 Drawing I
 0140 Drawing II
 0150 Jewelry Making
 0155 Ceramics/Sculpture
 0160 Painting
 0170 Art V – Independent Study

BUSINESS/COMPUTERS

0200 Business & Personal Finance I
 0201 Business & Personal Finance II
 0210 Sports & Entertainment Management
 0215 Business Law (Criminal & Civil)
 0225 Accounting I
 0230 Accounting II
 0270 Marketing I
 0275 Marketing II
 0280 On the Job Training (OJT) (4)
 0285 On the Job Training (OJT) (3)
 0290 On the Job Training (OJT) (2)
 0295 On the Job Training (OJT) (1)
 ??? International Business

ENGLISH

0300 College Preparatory English 9
 0305 Practical English 9
 0310 College Preparatory English 10
 0315 Practical English
 0220 Career 10 Readiness
 0320 College Preparatory English 11
 0325 Practical English 11
 0330 Advanced English 10
 0335 Practical English 12
 0340 College Preparatory English 12 w/College
 0345 Advanced Placement Literature & Composition
 0350 Advanced Placement English Language & Com
 0355 Advanced English 9
 0675 SAT Preparation/Verbal
 0375 Fundamentals of Public Speaking and Basic Acting
 0380 Creative Writing
 1425 Yearbook I
 1427 Yearbook II
 1430 Newspaper I
 1435 Newspaper II
 1440 Newspaper III
 1445 Newspaper IV
 1450 Sports Media and Literature

FOREIGN LANGUAGE

0500 Spanish I
 0502 Spanish II
 0504 Spanish III
 0506 Spanish IV
 0508 AP Spanish V
 0524 Italian I
 0526 Italian II
 0528 Italian III
 0530 Italian IV

MATHEMATICS

0620 Algebra 1
 0622 Algebra IA
 0623 Algebra IB
 0625 Plane/Solid Geometry
 0627 Fundamentals of Geometry
 0630 Honors Plane/Solid Geometry
 0635 Algebra II
 0636 Fundamentals of Algebra II
 0640 Honors Algebra II
 0645 Trigonometry
 0650 AP College Statistics & Probability
 0655 Pre-Calculus
 0660 Calculus
 0665 Advanced Placement Calculus, AB
 0670 Advanced Placement Calculus, BC
 0675 SAT Preparation /Math
 0680 College Algebra: Through Cooperation with Carlow University
 0685 Advanced Placement Computer Science Principles
 0687 Game Development with Javascript – Part I
 0688 Game Development with Javascript – Part 2
 0205 Workplace Readiness
 685 CS Python Fundamentals I
 686 CS Python Fundamentals II
 0690 Advanced Placement Computer Science A

MUSIC

0705 Band
 0710 Jazz Band
 0715 Band Auxiliary
 0720 Steel Band I
 0725 Steel Band II
 0730 Steel Band
 0735 Keyboard Lab I
 0745 Keyboard Lab II
 0750 Concert Choir
 0755 Chamber Choir
 0760 Music Technology I
 0765 Music Technology II
 0770 Music in Pop Culture
 0775 Ukulele Class
 0780 Guitar I
 1420 Stage Crew – (Technical Theater)

READING

1645 9th Grade Reading
1647 10th Grade Reading
1648 11th Grade Reading
1649 12th Grade Reading

FAMILY AND CONSUMER SCIENCE

0400 Family and Consumer Science I
0405 Family and Consumer Science II
0410 Family and Consumer Science III
0415 Family and Consumer Science IV
0420 Adventures in Food

SCIENCE

0905 Biology
0910 Honors Biology
0915 Life Science
0920 Physical Science
0925 Anatomy and Physiology
0930 Chemistry
0935 Honors Chemistry
0940 Advanced Chemistry w/College in High School Option
0945 Biotechnology
0950 Physics I
0955 Advanced Placement Physics 1
0960 Advanced Placement Physics 2
0965 Advanced Placement Physics C: Mechanics
965 Earth and Space Science
1965 Advanced Placement Physics C: Electricity & Magnetism
0970 Geology
0980 Advanced Placement Biology
0985 Organic Chemistry
0990 Advanced Placement Chemistry
0995 Advanced Placement Environmental Science
1000 Introduction to Forensic Science
1005 Forensic Science II

SOCIAL STUDIES

1200 American Cultures I
1205 American Cultures II
1210 World Cultures
1215 U.S. Government/Economics
1220 Advanced Placement Psychology
1225 Honors American Cultures I
1230 Honors American Cultures II
1235 Honors World Cultures
1240 Contemporary Issues
1245 History through the Eye of the Lens
1250 Advanced Placement European History
1260 Honors U.S. Government/economics
1265 Auto Theory
1270 Law and Society
1275 Sociology

CCBC CRIMINAL JUSTICE ACADEMY

CCBC AVIATION ACADEMY

CCBC STEM ACADEMY

CCBC HEALTH CAREERS ACADEMY

CCAC APPRENTICESHIP PROGRAM

TECHNOLOGY/APPLIED ENGINEERING

1300 Applied Technical Design w/CADD
1303 Material Fabrication
1305 Manufacturing Technology I
1310 Architecture I
1315 Architecture II
1330 Engineering Design I
1345 Graphics Design
1350 Digital Graphics Design
1352 Production Graphics Design
1355 Welding and Fabrication Technology
1360 Manufacturing Technology II
1365 Manufacturing Technology III
1395 Video Production I
1400 TV Studio (AATV)
1402 Honors Technology I
1405 Honors Technology II
0945 Biotechnology
1358 Robotics
1372 Home Repair and DIY
1398 Video Production II
???? Fundamentals of Cyber Security

HEALTH/PHYSICAL EDUCATION

1500 H & PE I
1505 H & PE II
1510 H & PE III
1515 Racquet Sports/Leisure Activities
1520 Weight Training
1522 Fitness Walking Elective
1525 Team Sports
1530 Athletic Conditioning
1535 Adaptive Physical Education
1540 Nutrition and Fitness

J.R.O.T.C.

0090 JROTC I
0092 JROTC II
0094 JROTC III
0096 JROTC IV
0098 Advanced Leadership Course (Learning Levels I-IV)

LEARNING SUPPORT

1600 English I – Grade 9
1605 English II – Grade 10
1610 English III – Grade 11
1615 English IV – Grade 12
1780 Study Seminar

BCCTC

1900 BCCTC AM
1905 BCCTC PM

LUNCH

2000 Lunch (1st Semester)
2005 Lunch (2nd Semester)