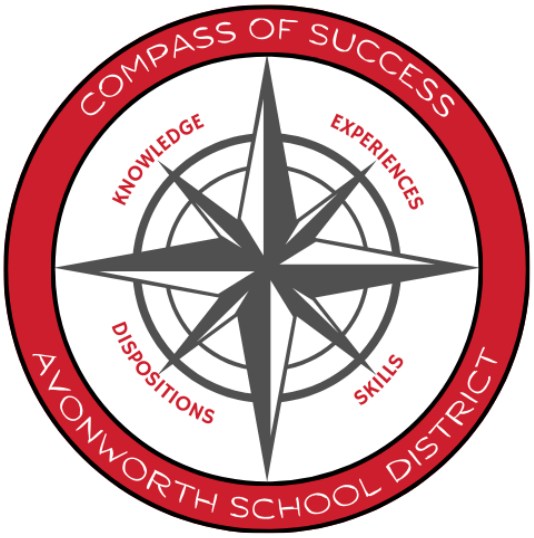
Avonworth High School
Course Description Book

2026-2027
School Year



ABILITY
is what you're capable of doing.

MOTIVATION
determines what you do.

ATTITUDE
determines how well you do it.

Avonworth High School Course Description Book

Revised: January 28, 2026

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The Avonworth School District will not discriminate in its educational programs, activities, or employment practices, based on race, color, national origin, sex, age, religion, ancestry, handicap, union membership, or any other legally protected classification. The announcement of this policy is in accordance with state and federal laws, including Title IX of the Education Amendments of 1972, and Sections 503 and 504 of the Rehabilitation Act of l973. Employees and participants who have an inquiry or complaint of harassment or discrimination, or who need information about accommodations for handicapped persons should contact the Assistant Superintendent, 258 Josephs Lane, Pittsburgh, PA 15237 at 412-369-8738.

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Mission Statement

The Avonworth School District empowers students through authentic experiences to become innovative thinkers and creative contributors to our world.

Avonworth High School Mission Statement

Avonworth High School strives to cultivate independent, altruistic, resilient leaders who are invested in their own learning, guided to explore their passions, and driven to make a positive impact on their community, nation, and world.

Graduation Requirements

Subject	Number Units	Subject	Number Units
English	4	Health 10-12	.50
Social Studies	3	Freshman Seminar	.50
Mathematics	3	Art/Humanities	.50
Science	3	Personal Finance	.50
Core Flex Credit	1	Evolving Technology	.5
Physical Education 9	.5	Computer Science	.5
Physical Education 10-12	.5		
Elective Courses	7	**Total Credits**	**25.00**

Previous (2025/2026) requirements: combining .5 Tech & .5 CS requirements = Evolving Technologies - options for students to take 2+ courses based on interest and ability)

Personal Finance	.50
Technology	.50
Computer Science	.50
Total Credits	**25.00**

Future Proposal for (2027/2028) requirements:

Personal Finance	.50
Evolving Technologies	1.0
Future-Ready Credit	1.0
Total Credits	**26.00**

All credits toward graduation must be earned at Avonworth High School, A.W. Beattie Career Center, an accredited high school from which one has transferred, a post-secondary institution's dual enrollment program and/or from an accredited summer, night, or alternative school. Credits may not be earned from private tutors, online programs

taught externally outside the school year or correspondence schools. All transfer, online or remedial credits must be approved by the administration.

High School Daily Schedule *(subject to change)*

AHS Bell Schedule

Mod A	8:00-8:41
Mod B	8:44-9:25
Mod C	9:28-10:09
Mod D	10:12-10:53
Mod E - Lunch 9/10 & LEAD 11/12	10:56-11:27
Mod F - Lunch 11/12 & LEAD 9/10	11:30-12:00
Mod G	12:03-12:44
Mod H	12:47-1:28
Mod I	1:31-2:12
Mod J	2:15-2:55

Terms and Definitions

Academic: These courses are college preparatory and meet the needs of many types of learners at Avonworth HIgh School. These courses prepare students for post-secondary academics, future-ready opportunities, and the workplace. All of theses- courses meet the PA Core Academic Standards. Most academic level courses have an expectation for classwork and also 2-4 hours of homework per week.

Honors: These courses offer students more rigorous and in-depth analysis of core course content. Honors courses offer a more rapid pace, complexity and more independent work outside of the classroom than Academic-level courses. All AHS courses will serve as college and career preparatory steps, but honors courses often require more reading, writing, and research.

College In High School (CHS)*:* These courses are college level classes affiliated with a specific college or university, such as the University of Pittsburgh and Carlow University. These courses are open and accessible to all AHS students but some require prerequisites and understanding of the high expectations. The students who elect to pay for credits may be granted those credits on a college transcript by meeting specific course expectations for testing and overall final grade. Students may also take these courses without registering and paying for credits. Reach out to grade-level counselor for more information about financial assistance.

Advanced Placement (AP): These courses offer college-level curricula and examinations to high school students and follow guidelines put forth by the College Board. These courses are the most rigorous offered at AHS and require a high level of dedication, often with 1-2 hours of homework a night per class. Most AP courses require prerequisites and/or a teacher recommendation. Colleges and universities may grant credit to students who score well on end of year exams, usually held in May. AP Exams are encouraged, but optional. There is a cost and registration for the

AP exams occurs in October. Reach out to a grade-level counselor for more information about financial assistance.

Global Scholars: The Avonworth Global Scholars Program is a club that provides all high school students enrolled in a foreign language an opportunity to meaningfully select interdisciplinary studies and activities, develop global awareness or competency, better prepare themselves for personal and professional success in an increasingly global society, and receive honors for their success in committing to and completing global studies. Students earn statewide recognition from the PA Department of Education for their achievement with a certificate and honors cord.

National Honor Society: The National Honor Society (NHS) stands as a beacon of intellectual rigor, a celebration of service, a paragon of leadership, and a champion of character. The NHS program empowers your students with the skills to be transformative leaders in school, the community, and beyond. Only juniors and seniors with a cumulative weighted QPA of 3.75 or higher will receive an invitation to apply to the NHS. Applications consist of a combination of activities, service, leadership and character. Membership is granted only to those students selected by the AHS Faculty Council.

***Prerequisite*:** This is a requirement for enrolling in certain classes. For example, some courses may require a teacher recommendation or successful completion of another class before a student may enroll.

Elective: These are courses that a student may elect to take in order to fulfill graduation requirements. Though students must take electives in order to earn credit toward graduation, specific electives are not mandatory. Elective classes often include technology, family and consumer science, music and art.

Core: These are classes that must be successfully completed in order to graduate. Core courses often include Math, English, Science, Social Studies.

Core Flex Credit: Students must continue to earn a total of 14 core content credits. These 14 credits must be accumulated by continuing to earn 4 credits of English. The student must earn a minimum of 3 credits of science, social studies, and math and will have a choice to earn the 14th credit in their choice of science, social studies, or math.

Academic Calendar

The school calendar shall be divided into two semesters. Each semester will consist of two nine-week grading periods.

Units for all classes are as follows:

Full Year	1 Credit
Semester	.50 Credit

Arts/Humanities Credit

Any course in art, drama, and music may satisfy the arts credit requirement. In addition, the English courses broadcasting, creative writing, journalism, and satire may also satisfy the arts requirement. Select A.W. Beattie Career Programs are acceptable. Please contact a School Counselor with individual concerns.

Computer Science, .5 credit

All students must meet the requirement of an introductory-level computer science course while in high school. These courses are important, as they serve as a foundation for future computer science and technology options within our high school curriculum. To meet the Computer Science .5 credit requirement, students must take 1 of the following courses:

1) Introduction to Programming 1
2) Understanding AI: Technology, Impact, and Innovation
3) Java Foundations: A Game-Based Approach

Evolving Technology, .5 credit

All technology education courses, higher-level programming courses, and engineering courses (Examples: Intro to Programming 2, Python, Media Arts courses, Animation, Engineering, Manufacturing, etc.) may be used for this evolving technology credit. A .5 credit course in Computer Science must also be completed also (see above).
In addition, the English courses in journalism may also satisfy the Evolving Technology credit, in some cases.
At this time, 12th Grade courses - Honors AI & Ethics, Honors Human Flourishing DO NOT count for this .5 credit requirement. Select A.W. Beattie Career Programs are acceptable. Please contact a School Counselor with individual concerns.

Future-Ready Credit (proposed for 2027/2028)

This 1 credit requirement will be earned, in 12th grade, through completion of senior expectations to include digital portfolio creation, career exploration/experience, and the successful stages of development through presentation of a Senior Showcase event and assigned panel expectations. These student efforts are supported directly by our Future-Ready Counselor, School Counselors, classroom teachers, and graduation project advisors. At a minimum, all requirements can be met within Avonworth High School, with opportunities to expand and enhance externally.

College-in-High School/Dual Enrollment

College-in-High School and Dual Enrollment courses are offered annually and are based upon students' needs and the availability of courses at the cooperating institutions. Through Dual Enrollment, students can earn high school and college credit on the campus of a post-secondary institution. Through College-in-High School courses, students can earn high school and college credit on the Avonworth campus in association with the cooperating accrediting college or university. In both cases, the tuition and transportation is the responsibility of the student/parent.

NCAA Eligibility

Students aspiring to play collegiate athletics must meet eligibility requirements set by the NCAA Clearinghouse. Avonworth Counselors and coaches are mentors through this process, but it is important for all potential athletes to ensure the rigor of their schedule meets the demands and requirements over their 4 years in high school.
https://web3.ncaa.org/ecwr3/
Guide for aspiring college-bound student- athletes

Academic Course Load

Students in grades 9, 10 and 11 must carry a minimum of six credits in a school year. Students in grade 12 must carry a minimum of 5 credits to ensure NCAA eligibility and progress towards graduation. A reduced course load is

only supported with administrative and parent approval along with a formal credit review. If a student is struggling academically, there are multiple tiers of support and intervention that will be utilized to assist. Counselors, teachers, and administrators can and will be involved as needed. **Link to AHS 4 year academic planning document.**

Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Biology, and Literature. Students must achieve proficiency on the Algebra I, Biology, and Literature Keystone Exams as a graduation requirement mandated by the Pennsylvania Department of Education. Not all students will reach this proficiency through testing, so there are multiple pathways to reach success. Five pathways exist for meeting state high school graduation requirements: (1) Keystone Proficiency, (2) Keystone Composite, (3) Career and Technical Education (CTE) Concentrator, (4) Alternative Assessment, or (5) Evidence-Based Portfolio. One example of an alternate assessment offered at Avonworth is the ASVAB test. Counselors will review Keystone scores and assist all students with reaching proficiency through these multiple new pathways to graduation if not proficient on Keystone Exams. Avonworth High School also offers the ASVAB and multiple opportunities to take the PSAT which can offer students more opportunity for proficiency.

Senior Showcase (Graduation Project)

All students who intend to graduate from Avonworth High School must meet the requirements of the Graduation Project, to be featured and presented at the Senior Showcase event. Each graduating senior will design and complete a digital portfolio showing students' future readiness and valuable experiences. Through the project, students will share their journey of discovery and growth throughout Avonworth High School, highlighting all of this in a digital portfolio that is captured in Xello. Students will begin their digital portfolio in Freshman Seminar class and add elements each year throughout high school. The project portfolio will be presented prior to graduation with guidance from Graduation Project Advisors and Future-Ready Coordinator.

Grading Scale

Letter Grade	***Academic***	***Honors Science Courses***	***Post-Secondary Level - includes AP and CHS course***	***Percentage***
A	4.00	4.50	5.0	100-93
A-	3.75	4.25	4.75	92-90
B+	3.25	3.75	4.25	89-87
B	3.00	3.50	4.00	86-83
B-	2.75	3.25	3.75	82-80
C+	2.25	2.75	3.25	79-77
C	2.00	2.50	3.00	76-73

C-	1.75	2.25	2.75	72-70
D+	1.25	1.75	2.25	69-65
D	1.00	1.50	2.00	64-60
F	0	0	0	59 and below

Incomplete Grades

Students receiving a grade of incomplete on their report cards are responsible for completing all work within a three-week period from the end of the nine weeks. If the student fails to accomplish this, the "I" will be changed to the grade the student had earned at the end of the quarter.

Failure

If a student fails a course, the course can be made up in an accredited and approved credit recovery program. This program may be through mail correspondence or online, but must be approved by the administration prior to being accepted for credit. If the credit recovery is not completed prior to the start of a new school year, the student's course placement may be affected.

Drop/Add

Students will have input with their class choices in conjunction with the recommendations of their current teachers. Every effort is made to place the student in the appropriate classes. If the student, parent, or teacher feels the appropriate placement was not accomplished, a schedule change request must be made within the first 2 weeks of each semester (for .5 credit classes) and/or school year (for 1 credit courses). Students wanting to drop a course must go through the proper drop/add process and schedule an appointment with their school counselor. Students in grades nine through twelve must register for at least 6 credits. Seniors may request 5 credits, but will be asked to complete a reduced course load contract in order to ensure they meet the 25 credit graduation requirements and are on a healthy and stable path to achieving those credits.

Class Rank & GPA

Avonworth High School does not maintain students' class rank based on GPA/QPA. Estimated class rank is available upon request to the Counseling Office for post-secondary applications or scholarship requirements as needed. Honors, CHS, and AP courses will earn weighted quality points. The weighted GPA will determine the Top 10% of the graduating class. The Top 10% of the class will receive recognition at commencement and also a significant honor cord to be worn at the ceremony.

Honor Roll Requirements

High Honor Roll	GPA of 3.5-5.0
Honor Roll	GPA of 3.0-3.49

*Achieving High Honor Roll or Honor Roll is not the same as graduating with Honors.

Summer Reading & Assignments

Due to the advanced nature of AP, Honors, and CHS courses, students enrolling in these classes should expect an increased workload and faster pacing of instruction. This may include summer work and reading. Any summer expectation of work or reading will be communicated clearly from the assigned teacher before the summer. Summer reading will be assigned for Honors English courses to maintain essential skills and introduce upcoming students to essential themes and techniques studied throughout the Honors curriculum at each grade level. The CHS and AP courses typically also have summer reading expectations and specific assignments required. While we strongly believe that summer is a time to refuel and disengage from the daily school regiment, some preparatory work is beneficial and necessary. Due dates will align with the start of the school year.

Personal Pathways Program

The Personal Pathways Program is a focused framework linking curricular choices with career and college readiness and direct exposure and opportunities pertaining to that field. The aim of this structure is to engage students with relevant experiences in chosen careers or industries beyond their classrooms. While the future-readiness programming at Avonworth High School is designed to support and inspire all students, the Personal Pathways are an additional opportunity for those students who want to connect their learning to careers at a deeper level with advisor guidance.

During the second semester of their 10th grade year, students will have the option of selecting one of seven personal pathways to focus their elective choices and out-of-school experiences (job shadows, internships, apprenticeships, graduation project) to an area of their own interest. Students may choose to take elective courses outside of their respective academies as well. During 9th and 10th grades, the Personal Pathways advisors and student-leaders will expose students to this opportunity and help guide them to determine if Personal Pathways is a beneficial fit for them. Students join a Pathway through an application process that begins at the end of 10th grade.

Avonworth Personal Pathways

1. **Pathway for Innovative Arts & Communications** - Advisor: Ms. Marnie Arnold
2. **Pathway for Business, Finance & Entrepreneurship** - Advisor: Mr. Mike Lincoln
3. **Pathway for Health & Medicine** - Advisor: Mrs. Julie Selep
4. **Pathway for Humanities & Social Sciences** - Advisors: Mrs. Melissa Reagle & Mrs. Bre Maisner
5. **Pathway for Science Technology, Engineering & Mathematics** - Advisor: Mrs. Deb Bacon
6. **Pathway for Future Educators: *Educators Rising*** - Advisor: Mr. Doug Haskins
7. **Pathway for Applied Engineering and Manufacturing** - Advisor: Mr. Bill White

Avonworth HS Personal Pathways Handbook

Course Descriptions

Please note: Some elective courses may not be offered on a yearly basis due to enrollment, teacher availability, and student interest.

Course Name			
Course Description			
Number of Units	Fulfills Art/Humanities, Evolving Technology, Core,	Grades Enrolled	Pre-Requisites

	Class or Elective Requirement		

ART

Studio Arts 1: Introduction to Fine Arts			
This course provides students with opportunities to work with a variety of materials and artistic styles. Emphasis will be placed on developing practical skills and original ideas. The goal of this course is to explore as many materials and artists as possible through the year, and to create work in which the student takes pride.			
.50	Arts/Humanities or Elective	9-10-11-12	None

Studio Arts 2: Intermediate Fine Arts			
This course provides advanced experiences building on knowledge gained in Studio Arts 1. Students will continue to explore a variety of mediums, materials, and artists while working to advance their skill set. The further development of analysis and history is emphasized. Students will have the opportunity to select areas of specialization and learn to apply their skills to their individual expression. Can be taken more than once through teacher recommendation.			
1	Arts/Humanities or Elective	10-11-12	Studio Arts 1 or teacher recommendation

Studio Arts 3: Advanced for Studio Artists			
Studio Arts 3 provides students with an opportunity to pursue further specialization in studio arts. Each enrolled student will work with the instructor to develop an individual program that emphasizes a specific area of art and/or the development of a portfolio.Students will refine basic techniques that are needed for most college portfolios, including portraits, figure drawing, and still life. Students will have continue to select areas of specialization and learn to apply their skills to their individual expression			
1	Arts/Humanities or Elective	11-12	2 Art courses or teacher recommendation

Honors Studio Art 4			
This course will provide students with the final steps of planning their portfolio for future academic pursuits. Students will work with the instructor to refine their personal style, create pieces of art for college admission, and continue to expand their knowledge of tools and medium choice. Art history will be included, as well as art analysis, and continuing to question how and why art is made. Additionally students will work with an area museum or artist to create a collaborative piece of art, called the Pittsburgh Galleries Project. Students will end the year by participating in the Avonworth High School Art Show.			
1	Arts/Humanities or Elective	11-12	2 Art courses or teacher recommendation

Artisan Crafts
This course explores traditional and contemporary craft practices that fall outside the standard studio art curriculum.

Students will engage in a variety of hands-on, material-based projects such as basket weaving, jewelry making, embroidery, fiber arts, and small-scale sculpture. Emphasis is placed on craftsmanship, problem-solving, and learning through making. The course is student-choice driven, allowing project themes, materials, and techniques to evolve each year based on student interests. Through experimentation, reflection, and critique, students will develop an appreciation for craft traditions while building practical skills and creative confidence.			
.25	Elective	9-10-11-12	None

Photography & Videography			
This course focuses on the technical and creative foundations of photography and video production through multiple modes of documenting including DSLR cameras, cyanotypes and drones. Students will build camera skills while learning composition, lighting, and visual storytelling for both still and moving images. Through hands-on shooting and editing projects, students will explore photo and video workflows using industry-standard software such as Lightroom & Premiere Pro. The course emphasizes intentional shooting, editing techniques, and critique while helping students develop confidence in capturing and communicating ideas through visual media. Because this course will also explore the use of drones for photography and videography, it is recommended to take Drones 101 to prepare, although it is not required.			
.50	Arts/Humanities, Evolving Technology, or Elective	9-10-11-12	None

Digital Illustration			
This course introduces students to digital illustration as a creative and professional practice. Using tools such as Procreate and Adobe software, students will develop drawing, design, and visual communication skills in a digital environment. Projects focus on line quality, color, composition, and stylistic development while encouraging experimentation and personal expression. Students will learn how digital illustration is used across industries such as animation, graphic design, and media arts while refining their technical and creative process.			
.50	Evolving Technology or Elective	9-10-11-12	None

Animation			
This course introduces students to the principles and practices of animation through hands-on projects that emphasize movement, timing, and visual storytelling. Students will explore both physical and digital animation techniques, including stop motion, frame-by-frame animation, and character performance. Using tools such as Procreate, Procreate Dreams, and Adobe Animate, students will develop skills in storyboarding, environmental animation, and character motion. The course emphasizes planning, iteration, critique, and refinement while encouraging students to develop a personal animated style.			
.50	Evolving Technology or Elective	11-12	None

Honors Media Arts
This is to provide advanced students with an opportunity to pursue further specialization in Media Arts. Students engage in bi-weekly critiques of their artwork. Each enrolled student will work with the instructor to develop an

individual portfolio that emphasizes a specific area of media arts (such as videography, photography, illustration, animation) and will develop a website to showcase that portfolio. Additionally students will work with an area museum or artist to create a collaborative piece of art, called the Pittsburgh Galleries Project. They will also have to design and showcase an entire flat for the art show, teach a lesson to their class in the medium of their choosing and have to write art criticisms of famous works in APA format.			
1	Arts/Humanities,Evolving Technology, or Elective	11-12	2 Art courses or teacher recommendation

Partners Art			
Partners Art promotes independence, active participation, leadership, and social integration in an inclusive setting while promoting lifelong love for the arts. This class is a perfect fit for someone interested in entering any field that will work with people, especially a classroom teacher, medical field, mental health field, and social workers. Students will work together as partners on a variation of media art and studio art based projects. There is a huge focus on building relationships, being inclusive, and working together. Students will rotate partners in each unit with the goal that by the end of the semester, everyone in the class has built a relationship with each other that will last beyond the ending of the course. There are multiple opportunities to develop skills that a traditional classroom setting does not afford. Further questions can be directed to Mrs. James and/or Miss Tiff.			
.50	Elective	10-11-12	2 Art courses or teacher recommendation

Ceramics 1			
This course introduces students to the versatile world of clay as a medium for both functional and sculptural expression. Emphasis will be placed on mastering fundamental construction techniques—including pinch, coil, slab, and an introduction to the potter's wheel—while fostering the development of a unique personal aesthetic. The goal of this course is to explore the history of ceramic artists across cultures and eras, experimenting with various glazing and firing processes along the way. Students will be challenged to transform raw earth into original works of art that reflect their own creative voice and craftsmanship, all while keeping themselves and the classroom safe. By the end of the nine weeks, students will have built a diverse portfolio of pieces in which they can take immense pride.			
.25	Arts/Humanities or Elective	9, 10, 11, 12	none

Ceramics 2
This course invites students to dive deeper into the complexities of clay, moving beyond basic forms toward mastery and intentionality. Emphasis will be placed on refining technical precision—such as advanced wheel-throwing, complex multi-part construction, and experimental surface treatments. The goal of this course is to bridge the gap between technical skill and personal concept. By exploring contemporary ceramic movements and pushing the limits of the material, students will learn to use clay as a language for

storytelling. Students will be encouraged to take creative risks, troubleshoot challenging designs, and produce a sophisticated body of work that reflects a high level of artistic maturity and pride.			
.25	Arts/Humanities or Elective	9, 10, 11, 12	Ceramics 1 or teacher recommendation

BUSINESS

Personal Finance			
This course will help students build a foundation in personal financial skills that will enhance their role as citizens, consumers, and leaders within our local and global economy. Students will become aware of their financial responsibilities and will learn sound financial practices that will lead to financial freedom.			
.50	Graduation Requirement	9 -10-11-12	None

Introduction to Business			
This course is designed to introduce you to the exciting and challenging world of business. Designed to be the very first business course you take, this class will serve as a background for other business courses you may take in high school and college and prepare you for future employment or business ownership. Through the information and activities provided in this course, you will increase your preparation to be a knowledgeable consumer, well-prepared employee, and effective citizen in our economy. Extensive coverage of finance, marketing, production, and management provide a survey-like approach to business operations.			
.50	Elective	9-10-11-12	None

Entrepreneurship			
This course will guide students step-by-step through the entire process of owning their own business. Students will develop critical thinking skills as they analyze and evaluate the various opportunities and pitfalls of owning a business. Topics of study will include market research, business planning, financing, marketing, hiring, staff management, accounting, and record-keeping. Students will prepare and present a complete business plan by the end of the course. A background in Accounting and Computer Applications is strongly recommended, but not required for this course.			
.50	Elective	11-12	None

Macroeconomics			
Economics offers students an introductory understanding of the forces which shape our economy and our lives. Focus areas will include key financial institutions such as The Federal Reserve and the stock market. Students will be exposed to the different ways in which economics can be used to describe and predict decision-making. Special attention will be paid to applying theoretical learning to relevant real-world situations.8			
1	Elective	11-12	Algebra I

Honors Accounting			
This course is the systematic study of how to plan, summarize, and analyze the financial concepts as the student annually solves problems concerning a single proprietorship, partnership, and corporation. The student also learns how to prepare and process financial data on a computer. Topics include special journals, subsidiary ledgers, worksheets, adjusting and closing entries, financial reports, data processing, payroll and tax accounting, depreciation, notes, interest, and accruals. A background in accounting is valuable no matter what your life goals may be. Employment opportunities are enhanced by thorough background knowledge of the above accounting procedures as well as enabling students to better manage their personal income and make good financial decisions.			
1	Elective	11-12	Algebra II

Introduction to Data Science: Storytelling through Numbers			
Is our air quality improving? What neighborhoods complain the most about potholes? Does defense really win championships? This course is designed to introduce students into the field of data science. Students will explore topics of interest through the lens of data by finding publicly available datasets about the topic. Students will then use technology to clean the data and run statistical tests to understand the relationship between variables of interest within the topic. Students will then use technology to make interesting visual displays to summarize their findings. By the end of the class, students will learn how to answer debatable questions not with opinions but by analyzing data.			
.50	Elective or Evolving Technology	10-11-12	Algebra I

COMPUTER SCIENCE - new courses

Introduction to Computer Programming 1			
This project-based course introduces students to the fundamentals of programming, critical thinking, and problem-solving. No prior experience is required. By the end of the course, students will have created their own game (e.g., Geometry Dash, Pac-Man). Topics include functions, variables, conditionals, testing, and debugging in Python.			
.50	Computer Science or Elective NCAA Approved	9-10-11-12	Algebra 1 A & B or Algebra 1

Java Foundations: A Game-Based Approach			
This beginner-friendly course introduces students to Java programming through the fun and creativity of building simple games. Students learn essential coding skills—such as variables, loops, methods, and problem-solving—while designing projects they can play. It's a great starting point for anyone curious about coding.			
.50	Computer Science or	9-10-11-12	Algebra 1 A & B or

	Elective		Algebra 1

Understanding AI: Technology, Impact, and Innovation			
This course introduces students to how artificial intelligence works, how it's used in the world around us, and the responsibilities that come with creating and using it. Students explore real-world examples of AI, discuss its impact on society, and learn to think critically about the ethical questions that guide its development.			
.50	Computer Science or Elective	9-10-11-12	None

Introduction to Computer Programming 2			
This project-based course builds on the foundation established in Introduction to Computer Programming 1. Students apply new programming concepts while creating larger, more dynamic games and programs. Topics include loops, strings, lists, return values, testing, and debugging in Python.			
.50	Evolving Technology or Elective NCAA Approved	9-10-11-12	Intro to CP 1

Introduction to Computer Programming with Python (College in High School)			
This course focuses on problem analysis and the development of algorithms and computer programs using a modern high-level language. Students learn Python fundamentals, including variables, operators, console and file I/O, conditionals, loops, functions, lists, and classes. Students may enroll in CS 0012 at the University of Pittsburgh for college credit.			
.50	Evolving Technology or Elective NCAA Approved	10-11-12	Intro to CP 1

Intermediate Programming using Java (College in High School)			
This intermediate course emphasizes object-oriented programming and other core programming concepts using Java. Topics include fundamentals, classes, arrays and array lists, searching and sorting algorithms, inheritance and polymorphism, GUIs, recursion, and linked lists. Prior programming experience is expected. Students may enroll in CMPINF 0401 at the University of Pittsburgh.			
1	or Elective NCAA Approved	10-11-12	Intro to CP 1 and CHS Python

Advanced Development: C++ and Application Design			
In this advanced course, students take their programming skills to the next level by learning C++ and using it to design and build full applications—such as mobile apps, software tools, or interactive systems. Their finished projects showcase their abilities and make strong additions to college and career portfolios.			
.50	Evolving Technology or	11-12	CHS Java

	Elective		

ENGLISH

Academic English 9			
Designed to develop critical reading and thinking skills, as well as strong argumentative writing skills, this course prepares students to effectively read complex fiction and nonfiction and to powerfully communicate ideas through writing. Students will demonstrate understanding and mastery of the Pennsylvania Common Core Standards through formal and informal writing assignments, various assessments, performance tasks, formal and informal presentations, and class discussion.			
1	Core, NCAA Approved	9	None

Honors English 9			
Designed to provide a highly rigorous experience at an accelerated pace, this course will challenge the advanced reader and writer to further develop critical reading and thinking skills, as well as strong argumentative writing skills by reading and working with complex pieces of fiction and nonfiction. Students will demonstrate understanding and mastery of the Pennsylvania Common Core Standards through formal and informal writing assignments, various assessments, performance tasks, formal and informal presentations, and class discussions. Summer Reading is assigned for Honors courses to maintain essential skills and introduce upcoming students to essential themes and techniques studied throughout the Honors curriculum at each grade level.			
1	Core NCAA Approved	9	8th Grade Recommendation

Academic English 10			
Designed to develop critical reading and thinking skills, as well as strong argumentative writing skills, this course focuses on effectively comprehending complex fiction and nonfiction and powerfully communicating ideas through writing. Students will demonstrate understanding and mastery of the Pennsylvania Common Core Standards through formal and informal writing assignments, performance tasks, formal and informal presentations, and class discussion.			
1	Core NCAA Approved	10	Academic/Honors English 9

Honors English 10			
Honors English 10 is a course focusing on critical reading, writing, thinking, and speaking. Analysis in this course will far surpass "I think / I feel" reaction statements –- as preparation for university-level work, students will need to provide solid, scholarly evidence for judgments and assertions. With a focus on close reading, literary theory, grammar, cultural literacy, vocabulary, and composition, Honors English 10 requires a substantial amount of out-of-class work as well as in-class participation. Placement in the course is contingent upon a teacher recommendation from either Academic or Honors English 9. Summer Reading is assigned for Honors courses to maintain essential skills and introduce upcoming students to essential themes and techniques studied throughout the Honors curriculum at each grade level.			
1	Core NCAA Approved	10	Honors English 9 and/or Teacher Recommendation

Academic English 11			
This course is designed for students whose reading, writing, and speaking skills reflect various levels of development. The content has been selected to prepare students who definitely intend to continue their education beyond high school, as well as for those students who are not yet certain of their future plans. The course includes reading selections representing all forms of American literature. Vocabulary enhancement and remedial grammar are studied throughout the year. Writing assignments encourage students to develop paragraphs and compositions with original, logical, and specific details. Students whose work indicates significant rapid development and progress will be encouraged to pursue independent study projects in addition to the material required in this course. Summer reading selections are available on an optional basis for all students in English 11. A research project is required.			
1	Core NCAA Approved	11	Academic/Honors English 10

Honors English 11			
This course is designed to instruct students whose skills in reading and writing reflect an advanced level of development. Building on skills from Honors 10 and Honors 9, this course emphasizes the continued growth of academic skills needed for success in Advanced Placement English Literature and post-secondary education. The content of the course focuses upon reading American literature, developing vocabulary skills, and enhancing composition skills. All forms of American literature are studied, with the selections representing various time periods and styles of writing, both fiction and nonfiction. Extensive analytical and expository writing is assigned throughout the year, with students encouraged to express themselves with original, logical, and orderly content. Summer Reading is assigned for Honors courses to maintain essential skills and introduce upcoming students to essential themes and techniques studied throughout the Honors curriculum at each grade level.			
1	Core NCAA Approved	11	Honors English 10 and/or Teacher Recommendation

AP English Language and Composition
The AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. Aligned to the College Board Official Course

Description, this high-school level approach to the traditional collegiate freshman composition course encourages students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically; to communicate writers' intentions and elicit readers' responses in particular situations. The course cultivates the rhetorical understanding and use of written language by directing students' attention to writer/reader interactions in their reading and writing of various formal and informal genres (e.g., memos, letters, advertisements, political satire, personal narratives, scientific arguments, cultural critiques, research reports). Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language (e.g., vocabulary, diction, syntax, spelling, punctuation, paragraphing, genre). Summer Reading is assigned for Honors courses to maintain essential skills and introduce upcoming students to essential themes and techniques studied throughout the Honors curriculum at each grade level.

1	Core	11	Honors English 10 and Teacher Recommendation

Academic English 12
This course blends composition and literature to ensure that students are college and career ready. There is a course focused on critical and comparative analyses of selected literature, and discussion. Literature includes active reading of poetry, nonfiction prose, narrative fiction, and drama as well as the study of literary elements. Selections of World, British, and American literature range from ancient works to contemporary pieces. Through both timed and formal essays, students write to understand, to explain, and to evaluate as they develop skills of argumentation. Vocabulary and language instruction are an integral part of every day's lesson. Explicit composition instruction, writing workshops, and frequent teacher and peer feedback develops students' composition skills for a variety of purposes and audiences. All writing assignments, both formal and timed, include instruction and feedback based on specific assessment rubrics or scoring guides. All compositions and oral presentations are course requirements.

1	Core NCAA Approved	12	Academic/Honors English 11

Honors English 12: Artificial Intelligence and Ethics
This high school course explores the intricate relationship between Artificial Intelligence (AI) and ethics, exploring various ethical frameworks and their application in a rapidly evolving technological landscape. Students will work with concepts, materials, and guidance through Duquesne University's Center for Tech Ethics, as well as various guest speakers within and outside of the Artificial Intelligence industry. Over one semester, students will engage in thought-provoking discussions and critical analysis, equipping them with the knowledge and skills to navigate ethical dilemmas in AI-driven environments. Summer Reading assignment is required. This course must be taken in sequence with Honors English 12: Human Flourishing.

.50	Core NCAA Approved	12	Honors English 11 or AP Language & Comp. and Teacher Recommendation

Honors English 12: Human Flourishing			
This high school course explores the concept of human flourishing throughout history and in contemporary society. Course work reflects listening, speaking, reading, and writing skills in that order. Collaborations with local, state, and national organizations and universities guide course projects on a year to year basis. Students will examine how humans have flourished, the significance of storytelling, historical perspectives, and ethical considerations. The course will encourage students to develop strong communication skills, engage in constructive conflicts, appreciate the importance of community, and envision a world of shared transcendent hope. Please see https://grable.org/publications/both-and/ for further context about flourishing studies.			
.50	Core NCAA Approved	12	AI and Ethics in the first semester

AP English Literature and Composition			
AP English Literature and Composition is a rigorous college-level course that investigates the human condition through literary works and encourages empathy through close reading and understanding across cultures and time. Following the curricular sequence recommended by the AP College Board, students engage with each other daily following a seminar-style Socratic inquiry and discussion model. The course focuses on the close, analytical reading of poetry, fiction, and drama as well as intensive study and application of literary elements in order to examine writers' reflection of the human condition, their artistic and cultural motivation for writing, and perspective changes in the context of time. Academic writing and research are integrated throughout the sequence of units. Literature selections range from ancient works to contemporary pieces. Students engage in timed and formal essays, literary argumentation, daily vocabulary and language instruction, AP Classroom practice questions and prompts, and a research paper melding a cultural aesthetic to an examination of art in conjunction with docents at the Carnegie Museum of Art. Students may potentially earn college credit by taking the Advanced Placement Examination in English Literature and Composition at the conclusion of this course. Summer reading and work will be assigned.			
1	Core NCAA Approved	12	Honors English 11/AP Language & Comp. and Teacher Recommendation

Journalism I			
This introductory course provides a survey of fundamental aspects of the craft and business of Journalism in the 21st century. Students curious about Journalism, either as a producer or consumer, are encouraged to enroll. Curricular content includes, but is not limited to, how the media functions, technical aspects of writing and producing news, photojournalism, and interview skills. "Students will frequently complete reporting and journalistic content for Avonews Online and also contribute to the main Avonews publication."			
.50	Arts/Humanities or Elective NCAA Approved	9-10-11-12	None

Journalism II
Students seriously interested in Journalism are encouraged to enroll. Basic skills and concepts from Journalism I will be developed, augmented, and refined in order to help students become stellar student journalists. Journalistic practices from the Associated Press will be heavily incorporated into writing assignments. Multimedia journalism will

be emphasized. Upon completion of Journalism I and II, students will have a portfolio of high quality work if they choose to pursue a career in this field. Student publication is required, including the *Avonews* and a variety of external publishing outlets. Students who completed Digital Storytelling and Journalism I should strongly consider Journalism II.			
.50	Arts/Humanities or Elective	9-10-11-12	Journalism I and/or Teacher Recommendation

Creative Writing I			
Creative Writing I focuses on imaginative writing including description, poetry, narration, and drama. Students learn to use techniques of creative writing as figurative language, concrete images, and basic stylistic devices. The format of the course features instruction on different writing styles and genres followed by examples, practice, and writing workshops. Students will also participate in peer revision and teacher conferences to show that writing is a continuous cycle of drafting and revision. By the end of the course students should have a well rounded, digital writing portfolio or collection. The course is a semester elective open to all high school students.			
.50	Arts/Humanities or Elective NCAA Approved	9-10-11-12	None

Creative Writing II			
Creative Writing II advances the skills and interests of the devoted writer. The course expands the foundations in description, poetry, narration, and drama established in Creative Writing I and includes experience in film and creative nonfiction. In addition to guest lectures from professional writers, students explore a writer's choices through formal assignments, independent projects, writing workshops, and journal writing. The course focuses on writing as a potential career, including discussions and lessons on publishing and an expansion on the revision process that was introduced in Creative Writing I. Each student will maintain a portfolio of projects and assessments.			
.50	Elective NCAA Approved	9-10-11-12	Creative Writing I and/or Teacher Recommendation

Introduction to Theater (Drama/Production-based)			
This project-based course is an introduction to the world of theater. Scope, sequence, and activities are determined by student experience, interest, and cultural offerings in the Pittsburgh arts community. Students will learn about the actual theater environment, different venues and their functions, the jobs involved in production, the history and evolution of drama, contemporary artists/performers/designers. Students will attend local performances as well.			
.50	Arts/Humanities or Elective	9-10-11-12	None

Modern Public Speaking			
This course is intended to develop an understanding of and facility in the preparation, organization, delivery and criticism of speaking in different scenarios. This course will evolve from foundations of strong public speech, through examples of inspiration and historical significance to each student finding his/her own strength in speech style and delivery.			
.50	Arts/Humanities or Elective	9-10-11-12	None

FAMILY AND CONSUMER SCIENCE

Culinary Foundations			
Students will step into the world of culinary arts and food science in this hands-on, comprehensive introduction to the kitchen. This course is designed to transform students from casual eaters into informed consumers and capable cooks. Throughout the semester, students will explore the journey of food from the farm to the table, mastering the technical skills needed to prepare nutritious and delicious meals while investigating the cultural and scientific forces that shape our diets. Students will spend significant time in the culinary lab, working in teams to execute recipes, manage a professional-grade kitchen, and develop a palate for diverse flavors.			
.50	Elective	9-10	None

Performance & Plate			
Performance and Plate is a hands-on culinary lab course that bridges the gap between the science of nutrition and the art of cooking. In this class, students will discover that food is the most powerful tool for optimizing the human body. Rather than just following recipes, students will learn to **prescribe** ingredients to meet specific physical and mental demands—whether they are preparing for a championship game, a theater performance, or a week of final exams. The course will incorporate cross-curricular elements and experts in the field and will culminate in a **Personal Performance Portfolio**. Students will select a personal health or athletic goal, research the specific nutritional requirements for that goal, and develop a 7-day culinary plan that they will execute and present to the class. This course is designed to help students use food in ways that positively support every aspect of their lives.			
.50	Elective	9-10-11-12	None

Popular Foods Trends			
In this dynamic, hands-on lab course, students explore the intersection of cutting edge culinary skills, social media influence, and global health movements. From the rise of **"Swicy" (Sweet & Spicy)** flavors and **Global Fusion** to the science of **Plant Based Innovation** to the longevity secrets of the **Blue Zones Diet**, students will analyze how culture, technology, and geography shape what we eat. Moreover, students will discover how to source local ingredients, develop a hydroponic system, understand seasonality, reduce food miles, and create dishes from scratch, by learning from local farm partnerships, and through hands-on cooking focusing on fresh, seasonal produce. This course combines professional culinary techniques with creative entrepreneurship, teaching students not just how to follow a trend, but how to evaluate its impact on human health and the environment. This course combines professional culinary techniques with creative entrepreneurship, culminating in a "Food Trend Concept" final project.			
.50	Elective	10-11-12	None

International Culture & Cuisine
Students will take a global tour without leaving the kitchen! This course explores the deep connection between **geographic location, historical events, and the food traditions** of people around the world. Students will dive into the "why" behind global diets, examining how religion, climate, and trade routes shaped the flavors we know today. Through a combination of historical research, sensory analysis, and hands-on laboratory experiences, students will

develop advanced culinary techniques while gaining a profound appreciation for global cultures and their stories around cuisine.			
.50	Elective	11-12	None

Interior Design			
This course is designed for students that have an interest in interior design and interior decorating. Students will learn the elements and principles of design and how to choose functional materials for different needs. They will apply this knowledge in several room design projects including bedrooms, bathrooms, living rooms, and kitchens. By the end of the course, the students will be able to draft an entire apartment.			
.50	Arts/Humanities or Elective	9-10-11-12	None

Child Development			
Explore the science of child development and the art of teaching. This course tracks growth from birth through age six, focusing on key physical and cognitive milestones. Students will apply their learning directly through a classroom practicum, where they will design and lead customized activities for young learners. Ideal for future educators and medical professionals, this course bridges the gap between developmental theory and professional practice.			
.5	Elective	9-10-11-12	None

MATHEMATICS

Algebra 1 - PART A			
This course prepares students to build the fundamental skills necessary for success in a standard high school algebraic class. It is the foundation for higher levels of mathematics and the gateway for future math courses. The course will focus on expressions, equations, and functions, including the following units of study: Simple Algebraic Expressions, Inequalities, Functions, Square Roots, Irrational Numbers, Estimation, Ratio and Proportion, Coordinate Graphs, Slope; Collecting, Displaying, and Analyzing Data; and Three-Dimensional Geometry. This course will extend concepts with additional time for growth and understanding as a path towards mastery of algebraic success. Algebra 1 PART B will be developed and serve as a second step following PART A in the following school year.			
1	Core	9	None

Algebra 1 - PART B			
This course continues to prepare students to build the fundamental skills necessary for success in a standard high school algebraic class. It is the foundation for higher levels of mathematics and the gateway for future math courses. This course will extend concepts with additional time for growth and understanding as a path towards mastery of algebraic success. Algebra 1 PART B will serve as a second step following PART A.			
1	Core	10-11	Algebra 1 - Part A

Advanced Algebra			
This course is an algebra-based, application-driven course for recommended 11th and 12th grade students that integrates concepts from Geometry, Algebra 2, Statistics, and Precalculus through real-world financial contexts. Students explore topics such as banking, investing, credit, employment, budgeting, and retirement planning while using technology and multiple representations to model and analyze financial situations. Mathematical concepts are introduced and developed as needed, emphasizing problem solving, pattern recognition, and data-driven decision making. The course helps students understand the relevance of mathematics in their daily lives and future financial decisions. Advanced Algebra can serve as a third step following Algebra 1 - Parts A and B.			
1	Core	11-12	Algebra 1 - Parts A and B and Teacher Recommendation

Algebra I			
The concepts of algebra are developed through the motivation of everyday applications. Problem solving skills are honed as students gain knowledge of the fundamental rules of algebra, create and interpret graphs, solve first and second degree equations, solve systems of equations, simplify rational expressions, and develop the properties of exponents and rational numbers.			
1	Core NCAA Approved	9	None

Honors Algebra I			
Honors Algebra I will provide more challenges that help form the foundation for future advanced math classes. There will be more emphasis on functions, advanced problem solving, and graphical analysis. Students will develop more sophisticated skills and use them to extend the basic algebra concepts and properties, enabling synthesis of many representations and analyses of the structure and connections of mathematics.			
1	Core NCAA Approved	9	Teacher Recommendation

Geometry			
The structure of the physical world around us will be described and analyzed using theorems, definitions, and postulates. Problems will be solved using coordinate geometry, constructions, and/or algebraic techniques. The major topics of study include parallelism, congruent triangles, polygons, similarity, circles, transformations, and planar and space measurement.			
1	Core, NCAA Approved	9-10	Algebra I

Honors Geometry
This course is a faster-paced version of geometry. In this accelerated course, students will explore two and three-dimensional shapes (and their properties) as well as developing logical thinking skills and utilizing algebra used in the physical world. A larger emphasis on technology coupled with “real-life” products will enable students to see

the more practical side of mathematics.			
1	Core NCAA Approved	9-10	Honors Algebra I and/or Teacher Recommendation

Algebra II			
Algebra II is designed to extend the topics of algebra and geometry such as functions, linear equations, graphs, and linear systems and to introduce matrices, quadratic equations, imaginary numbers, polynomial functions, factoring, radical expressions, radical exponents, and exponential functions. Real world applications and a graphing calculator perspective will be included in each topic as well.			
1	Core NCAA Approved	10-11	Geometry

Honors Algebra II			
Honors Algebra II is designed for students planning on attending college or some institution of higher learning. Though many of the same concepts as Algebra II will be explored, Honors Algebra II will provide students with a more challenging curriculum that will help for the foundation for future studies in advanced math classes. This course develops deeper comprehension of algebraic structure. New symbolism, concepts, and topics are introduced to expand students' understanding and knowledge and to provide techniques for solutions of more complex problems. This course is recommended for students who plan to take Calculus.			
1	Core NCAA Approved	10-11	Honors Geometry and/or Teacher Recommendation

Trigonometry			
Trigonometry/Pre-Calculus is designed to complement the study of algebra and geometry. The course is suited for students planning to continue their math program in high school but not at an accelerated pace. The material covered will include: functions and their graphs, mathematical modeling, exponential and logarithmic modeling and graphing, trigonometry, & applications of trigonometric functions. Topics will be approached algebraically and graphically utilizing a TI-84 graphics calculator. Topics will also be discussed in cooperative groups where students will be encouraged to explore a deeper understanding of the content through real-world applications and investigations.			
1	Core or Elective NCAA Approved	11-12	Algebra II

Honors Trigonometry/Pre Calculus
Honors Trigonometry/Pre-Calculus is designed to complement the study of algebra, geometry, and trigonometry. The course is suited for students planning to continue their current honors math program or for students looking to enter the honors math program. Material covered will include: functions and their graphs, mathematical modeling, exponential and logarithmic modeling and graphing, analytic trigonometry, applications of trigonometric functions, polar coordinates and vectors, analytic geometry and conic sections. Topics will be approached algebraically and graphically utilizing a TI-84 graphics calculator. Topics will also be discussed in cooperative groups where students will be encouraged to explore a deeper understanding of the content through real-world applications and investigations.

1	Core or Elective NCAA Approved	11-12	Algebra II

Business Calculus (College in High School, University of Pittsburgh)			
This course provides an introduction to calculus for students interested in business, economics, or social science. Topics include functions, limits and continuity, differentiation, applications of differentiation, integration, exponential and logarithmic functions, and an introduction to multivariable calculus. Many College in High School instructors also include the calculus of trigonometric functions. Prerequisite (Pitt): A rigorous high school algebra background that includes exponentials and logarithmic functions or precalculus is a prerequisite for the course. Proficiency in algebraic manipulation is essential.			
1	Core or Elective NCAA Approved	11-12	Honors Trig/Pre-Calculus

Advanced Placement Calculus (AB)			
This course is designed for those eleventh and twelfth grade students who plan to attend a college or university concentrating in an area of mathematics, a mathematically related science, or engineering. This course consists of a study of limits, the derivative, and the integral with an emphasis on applications of the derivative and integral. The TI graphing calculator is used heavily in this course. Students may take the AP Calculus AB exam at the end of this course for college credit.			
1	Core or Elective NCAA Approved	11-12	Honors Trig/Pre-Calculus

Advanced Placement Calculus (BC)			
This course is designed for those twelfth grade students who have successfully completed AP Calculus AB and have a strong mathematical background. In this second level calculus course students will extend the concepts of AP Calculus to the topics of advanced integration techniques, parametric equations, polar coordinates, vector-valued functions, differential equations, and infinite series. Students may take the AP Calculus BC exam at the end of this course for college credit.			
1	Core or Elective NCAA Approved	12	AP Calculus AB

Probability & Statistics (College-In-High School, University of Pittsburgh)
This course is designed to give students the statistical background required by many majors in college. Topics include describing data, basic probability, measures of central tendency, correlation and regression, normal and binomial distributions, and real life modeling with experiments. Topics will be explored through the use of technology. At the conclusion of this course, students may earn four credits from the University of Pittsburgh.

1	Elective, NCAA Approved	11-12	Algebra I

Advanced Placement Statistics			
This course is designed to introduce those eleventh and twelfth-grade students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes that include exploring data, sampling and experimentation, anticipating patterns, and statistical inferences. Students may elect to take a test prepared by the College Entrance Examination Board to earn four college credits. The results will be certified by the testing agency to college admission officers for possible advanced standing and/or credit in the freshman year of college. (Weighted Grade Course)			
1	Elective NCAA Approved	12	Algebra I and Teacher Recommendation

Introduction to Data Science: Storytelling through Numbers			
Is our air quality improving? What neighborhoods complain the most about potholes? Does defense really win championships? This course is designed to introduce students into the field of data science. Students will explore topics of interest through the lens of data by finding publicly available datasets about the topic. Students will then use technology to clean the data and run statistical tests to understand the relationship between variables of interest within the topic. Students will then use technology to make interesting visual displays to summarize their findings. By the end of the class, students will learn how to answer debatable questions not with opinions but by analyzing data.			
.50	Evolving Technology or Elective	10-11-12	Algebra I

MUSIC

Concert Choir			
The study of music builds self-esteem and contributes to personal, as well as interpersonal development, and expressions. This class offers the student an opportunity to become an active participant in a choral group who performs (Holiday and Spring concerts). The only prerequisite is a willingness to learn and a pleasing voice. Participation in choral performances, both day and evening, is mandatory.			
1	Arts/Humanities or Elective	9-10-11-12	None

Concert Band			
Concert Band is a performance-oriented class focused on performing, studying and developing individual and group instrumental skills and literature at the intermediate and intermediate-advanced level. Students will be active participants in a band setting that performs throughout the school year in at least two seasonal concerts (winter and spring). The students will be evaluated regularly through playing tests and performances. Participation in band performances, both day and evening, is mandatory. Placement in Concert Band is determined through auditions as documented in the standard PMEA performance rubric, and by required instrumentation. After placement auditions, students are rostered by the band directors.			
1	Arts/Humanities or	9-10-11-12	None

	Elective		

Honors Wind Ensemble			
Honors Wind Ensemble is a performance-oriented class focused on performing, studying and developing individual and group instrumental skills and literature at the intermediate-advanced and advanced level. Students will be active participants in a band setting that will perform 3-4 times a year in seasonal concerts (winter and spring) and other events, and participate in PMEA auditions and adjudications. The students will be evaluated regularly through playing tests and performances. Participation in band performances, both day and evening, is mandatory. Placement in Honors Wind Ensemble is determined through auditions as documented in the standard PMEA performance rubric, and by required instrumentation. After placement auditions, students are rostered by the band directors.			
1	Arts/Humanities or Elective	9-10-11-12	Teacher Recommendation

American Popular Music: A Reflection of Society (1850-Present Day)			
American Popular Music: A Reflection of Society will examine the relationship of popular music to the lives of people throughout the twentieth century. Concentration will be on the musical styles reflective of each era of history and how each style was affected by the society of the times. The students will examine how each era of popular music (Civil War Era, blues, ragtime, jazz and rock 'n' roll, R n'B, classic rock, funk, disco, pop, hip hop) relates to historical events, technological innovations and inventions, cultural trends, etc.			
.50	Arts/Humanities or Elective	9-10-11-12	None

Honors Music Theory & Composition			
This course offers students the opportunity to learn and apply music theory and composition skills. The curriculum develops a working understanding of note reading and writing, sightreading/sightsinging, intervals, scales, chords/harmony, basic composition techniques and analytical techniques that help students both compose/arrange competently as well as further understand how composers/arrangers are effective. Students can use this course as a path to take the AP Music Theory examination with the support of the teacher.			
1	Arts/Humanities or Elective	9-10-11-12	Teacher Recommendation

PHYSICAL EDUCATION AND HEALTH EDUCATION

PE 9: Wellness & Group Fitness

The course is designed to promote lifetime fitness and physical activity and health and wellness for all 9th grade students. Focus is to help all students become informed, independent decision-makers capable of planning for enjoyable lifetime fitness and physical activity and achieving personal fitness and sport activity goals. The principle objectives include: assisting students in discovering the value and benefits of physical activity for reducing the risk of various diseases and physical conditions, and in promoting health and wellness. They learn the benefits of building the five components of health-related fitness and the principles that will help them build fitness properly. In addition, they learn the principles of overload, progression, and specificity and how to apply them by using the FITT (frequency, intensity, time and type) formula to determine how much exercise is enough.			
.50	Graduation Requirement	9	None

PE 10-12: Total Body Fitness			
Focus is largely on the growth and development of students through the medium of total body activities. The objectives include: 1. The development of motor skills and physical fitness 2. The development of desirable social attitudes and emotional traits 3. The development of an appreciation for a wide variety of physical activities that would result in continued participation for the enjoyment of leisure time activities. 1 full credit of this course is required of all students during the 10th, 11th, and 12th grades. Failure to dress and/or participate on an ongoing structured basis would eventually warrant failure of that class. 1.5 credits in physical education must be earned before a student can graduate.			
.50	Graduation Requirement	10-11-12	None

Health 10-12			
This course provides an in-depth examination of several aspects of mental, physical, emotional, and social health and well-being. Individual responsibility for one's own level of health and wellness throughout the lifespan continues to be emphasized. Students apply health skills such as accessing information, analyzing influences, decision making, goal setting, interpersonal communication, self-management, and advocacy to content areas including stress management, suicide prevention, relationship abuse, personal safety, HIV/AIDS, chemical addiction and cardiovascular diseases with certification in American Heart Association adult and Child CPR.			
.50	Graduation Requirement	10-11-12	None

SCIENCE

Biology			
Biology is a required science course that emphasizes the chemical, structural, and functional forms of living organisms. Students complete activities for a range of topics including molecular-basis of life, growth and development in organisms, flow of matter and energy through environments, relationships among living organisms in ecosystems, inheritance and variation of characteristics among living forms, and evidence of evolution of life on Earth. Laboratory investigations will be completed to enhance content understanding. This course includes the Pennsylvania Keystone Exam which is an end-of-course test.			
1	Core, NCAA Approved	9	None

Honors Biology			
Honors biology is a course that emphasizes living organisms and their biomolecular composition, form and function, and interactions in and with the environment. Students complete activities for a range of topics including molecular-basis of life, growth and development in organisms, flow of matter and energy through environments, relationships among living organisms in ecosystems, inheritance and variation of characteristics among living forms, and evidence of evolution of life on Earth. Laboratory investigations and data analysis will be completed to enhance content understanding and real-world application. This course includes the Pennsylvania Keystone Exam which is an end-of-course test. (Weighted - Honors)			
1	Core, NCAA Approved	9	Teacher Recommendation

Advanced Placement Biology			
This course is designed for students who intend to continue the study of biological sciences in college. It is a college level biology course typically taken by freshmen biology majors, taught at a college pace, and is based upon the Advanced Placement Biology Curriculum. Students will be expected to complete assignments, projects, and readings outside of class time. At the conclusion of the course, students will have mastered the biomolecular basis of life, structure and function of cells, heredity, gene expression, and evolution among living organisms, and community interactions and ecosystem dynamics. The course utilizes intensive multi-day laboratory experiences employing statistical data analyses. The AP Biology screening process requires successful completion of all prerequisites including biology and chemistry with at least an overall grade of "B" in each class. Students may earn college credits by taking the Advanced Placement Examination in Biology at the conclusion of this course. (Weighted Grade Course)			
1	Core or Elective NCAA Approved	11-12	Biology & Chemistry and Teacher Recommendation

CHS Anatomy and Physiology (College-In-High School, Carlow University)				
This is a comprehensive, yearlong college course designed for students with an interest in the structures and functions of the human body and may aspire to pursue a career in the allied/medical health professions. Students will be exposed to topics of study including anatomical terminology, tissues, levels of biological organization, homeostasis and the structures and functions of the major organ systems of the human body including the integumentary, skeletal, muscular, nervous, cardiovascular, respiratory, lymphatic, digestive, and urinary systems. Laboratory investigations will be used to enhance class lectures and discussions. Students have the option of registering for credits, 4 per semester, through Carlow University for Anatomy & Physiology I and Anatomy & Physiology II which correspond to their Biology 201 and 202 courses.				
1		Core or Elective NCAA Approved	10-11-12	Biology

The Physical Sciences
The Physical Sciences is an interdisciplinary course introducing students to the fields of chemistry and physics. Through hands-on activities, focused discussions, and unique applications, students will gain an understanding of some of science's most fundamental ideas about the physical world.

This class is specifically designed toward those students who have not already taken a chemistry or physics course. Through this course, students will hopefully build a passion for the physical sciences and elect to take either of those distinct courses in their future.			
1	Core or Elective NCAA Approved	10-11-12	Biology

Chemistry			
This course is designed to provide a thorough introduction to the topics of chemistry. Physical and chemical states and properties of matter, atoms and elements,applications of the periodic table, molecules, bonding, reactions, and molecular states will be explored. Hands-on activities and labs; enhanced by virtual tools are implemented as applicable. This course is an overview course intended as an introductory study of chemistry.			
1	Core or Elective NCAA Approved	10, 11, 12	Algebra I & Biology

Honors Chemistry			
This course is intended to provide a very thorough and demanding first year chemistry course. Atomic and molecular structure, thorough understanding of the periodic table, bonding, composition stoichiometry, chemical and reaction stoichiometry, and states of matter are explored. Hands-on activities and labs; enhanced by virtual tools are implemented as applicable. As math is utilized in this course, success in Algebra is required. This course is intended for those who wish to dive deeper into the core content, and may want to pursue further chemistry or science study. This course is required to take AP Chemistry. (Weighted - Honors)			
1	Core or Elective NCAA Approved	10, 11,12	87% or above in Honors Biology and Algebra I; (or 93% or above in Biology), Teacher Recommendation

Advanced Placement Chemistry
This college level course focuses on advanced topics in Chemistry, building upon material studied in Honors Chemistry while expanding into college-level advanced topics. AP Chemistry will provide the student with the necessary knowledge to be adequately prepared to handle advanced Chemistry at the college level. The curriculum followed is approved by the College Board. Students anticipating college study in engineering, biological, and medical fields will find this course instrumental to their success in these areas. This course relies on the topics covered in Honors Chemistry as a foundation. The student will study the topics of advanced stoichiometry, bonding and geometries, reactions, titrations, solutions, molecular interactions, REDOX and electrochemistry, acids and bases, kinetics, equilibrium, solubility, and thermodynamics. Significant laboratory work is integral and emphasizes the material covered in the classroom. Practice AP test questions will be reviewed on an ongoing basis with each unit. The AP Chemistry screening process will require successful completion of the prerequisites with a minimum of an 85% overall grade. Students may earn college credits by taking the Advanced Placement Examination in Chemistry at the conclusion of this course. (Weighted Grade Course)

1	Core or Elective NCAA Approved	11-12	Chemistry, Algebra II, and Teacher Recommendation

Physics			
Physics introduces students to a new way of describing and understanding their interactions within the physical world. Through discussion, inquiry activities, and hands-on lab activities, students will develop an understanding of the big ideas of science (stability and change, systems analysis, conservation, patterns of motion, energy transfer) that bring sense and predictability to the observable events in their everyday lives. Through the course, students will uncover concepts in mechanics, waves, and relativity, and apply these concepts through mathematical application to new scenarios. Physics will utilize algebraic and geometric skills, though a larger component of assessment will emphasize student growth and ability in scientific reasoning and critical thinking.			
1	Core or Elective NCAA Approved	11, 12	Algebra I & Biology or Teacher Recommendation if have not taken Chemistry

Honors Physics			
This course is intended to provide a very thorough and demanding first year physics course. The course will follow PA standards and Next Generation Science Standards (NGSS) that focus on “cross-cutting” skills, science and engineering practices, and disciplinary core ideas. This course is intended for those who wish to dive deeper into core content, and who may want to pursue further physics or science study. (Weighted - Honors)			
1	Core or Elective NCAA Approved	11*, 12	80% or above in most recent science and math courses; Teacher Recommendation

Advanced Placement Physics			
AP Physics C is a full year course, building upon the principles encountered in Honors Physics. The course is split evenly into two major components: classical mechanics and electromagnetic theory. Each week, students will explore not only new concepts, but complex applications, and laboratory skill development as well. Considerable attention will be paid to problem-solving and analysis, utilizing algebraic, trigonometric, and calculus-based skills. Because the course will deal extensively with differentiation and integration, it is expected that all students either have completed Calculus I or are taking it concurrently. By the end of the course, all students will be prepared to take both the *AP Physics C Mechanics* and the *AP Physics C Electricity and Magnetism* exams.			
1	Core or Elective NCAA Approved	11, 12	Physics/Honors Physics, and Teacher Recommendation Course must be taken concurrently with (or after)

			Calculus.

Astronomy: Introduction to Space Science			
Through model making and hands-on activities this introductory course is designed to give students the ability to analyze and explain the universe. The course will introduce students to backyard astronomy, identify, locate and describe the planets, stars and galaxies. Describe the appearance, apparent motions and models of the objects in the sky such as the sun, moon and planets and stars. Introduce students to extraordinary celestial objects such as galaxies, exoplanets, pulsars, neutron stars, and black holes. We may even explain the universe on its biggest scale, the big bang, through the models of cosmology and evidence. Through this course students will sharpen their logical reasoning skills and get a better understanding of both scientific observation and scientific deduction.			
.50	Core or Elective NCAA Approved	9-10-11-12	None

Environmental Science			
Environmental science is a course which includes the study of the interrelationships that exist in environmental systems, ecological problems, and human courses of action. Questions of human populations and their interaction with the environment, as well as basic ecological principles, environmental ethics, resource use, and conservation are addressed. The units of study include sustainability, ecosystem resilience, biodiversity, watersheds and wetlands, and climate change. An overarching theme of the course is weighing alternatives humans might use to build a society with fewer harmful impacts to the Earth.			
.50	Core or Elective NCAA Approved	9, 10, 11, 12	None

Earth Science			
The Earth/Geo-Science course is designed to interpret and understand the world around you. In order to do so, students will investigate and study the interactions between the four major Earth's spheres, including the geosphere, atmosphere, hydrosphere and biosphere in order to explain Earth's formation, processes, history, landscapes, how and why Earth changes over time. The course will also explore how current actions of man interactions affect Earth's spheres leading to local and global changes.			
.50	Core or Elective, NCAA Approved	9-10-11-12	None

Introduction to Human Body Science
This course provides an overview of the systems of the human body with an emphasis on human growth and development, cardiovascular, digestive, nervous and respiratory health. Students will be encouraged to take individual responsibility for learning how to navigate important health and wellness decisions throughout life. Students will also learn about health care and first responder career opportunities.

.50	Core or Elective	9, 10, 11, 12	None

***What is the Mind?* Introduction to Neuro-Science**			
This course will focus on the structure and function relationship between neurons and how we behave. Primary focus will start with the anatomy of nerve cells and the brain which will then transition to analyzing sensory input from multiple senses. Brain waves and how they alter will also be studied.			
.50	Core or Elective	11, 12	Biology; Chemistry (Chemistry can be taken concurrently)

Ecology			
Ecology is the branch of Biology that deals with the relations of organisms to one another and to their physical surroundings. This science elective course will focus on a unique combination of Zoology, Botany, and Agriculture. If you have an interest in animals, plants, and the general connection of all things growing and living together in our world…this is a great semester option to follow your 9th grade year in Biology.			
.50	Core or Elective	10-11-12	Biology

Scientific Research and Application (semester or full-year)			
This self-directed course is designed for students to explore their own scientific interests and grow toward expertise in a chosen field. Through participation in research competitions and the completion of unique projects, students will gain the opportunity to dive deeper into any scientific field of their choosing. All students participating in the course will communicate with professionals in their field and present their findings to multiple competitive panels, through the Pennsylvania Junior Academy of the Sciences and the Pittsburgh Regional Science and Engineering Fair. In addition to investigating the research process, students will learn to recognize scientific fallacies, gain practice in scientific communication, and collaborate to complete a complex design problem. *Could be used as independent scientific study based on student need and/or request to pursue a passion.*			
.25 or .50	Elective NCAA Approved	10*-11-12 *requires self-discipline; teacher discussion	Teacher Recommendation

SOCIAL STUDIES

United States History - Part 1

During the freshman year students will explore the history of the United States from the time of the Revolutionary War to the Civil War era. Students will examine political, economic, foreign policy, and cultural changes. Students will be introduced to skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections. Successful completion of this class also includes gaining an understanding of organizational skills, study skills, and study strategies.			
1	Core, NCAA Approved	9	None

Honors United States History - Part 1			
This course requires the learner to be highly motivated to work independently and at an accelerated rate. **Students desiring to take this course must have excellent reading abilities and writing skills.** Honors United States History Part 1 is designed to prepare students for next-level honors and AP classes including writing several document- based essays. Students will investigate significant events, individuals, developments, and processes beginning with the French and Indian War through the Reconstruction era. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections. (Weighted Grade Course).			
1	Core NCAA Approved	9	Teacher Recommendation Required

World Affairs 10			
World Affairs is an in-depth study of the historical events and trends that have shaped the modern world, with a focus on Asia, Europe, and Africa, beginning in the 18th century. Topics include, but are not limited to, the French Revolution, the Industrial Revolution, Imperialism, WWI, Russian Revolution, Interwar Period, WWII, and Modern China. Course activities include, but are not limited to, primary source analysis, historical simulations, presentations, and a variety of other performance tasks. In addition, the course will feature a heavy focus on current events and their relationship to the historical topics covered in class.			
1	Core, NCAA Approved	10	None

Honors World Affairs 10			
Though the scope of material is similar to World Affairs, Honors World Affairs is a separate and distinct course geared for the highly motivated learner. Students will be expected to work independently at an accelerated pace. Students should be comfortable both reading and writing at a high level before considering this course. Honors World Affairs is an in-depth study of the historical events and trends that have shaped the modern world, with a focus on Asia, Europe, and Africa, beginning in the 18th century. Topics include, but are not limited to, the French Revolution, the Industrial Revolution, Imperialism, WWI, Russian Revolution, Interwar Period, WWII, and Modern China. In addition, the course will feature a heavy focus on current events and their relationship to the historical topics covered in class.			
1	Core NCAA Approved	10	Honors US History Pt. I and/or Teacher Recommendation

United States History - Part 2			
In this course, students will examine the social, political, economic, and cultural history of the United States from the Reconstruction Era (1865) to the present. US History II examines social reform, world wars, the Great Depression, Cold War, and post-Cold War eras. Themes include American culture, civil and human rights, technological change, economic change, immigration and migration, the expansion of the federal government, and the study of US foreign policy. The overview and sequence applies to College Prep and Honors Level courses.			
1	Core , NCAA Approved	11	None

Honors United States History - Part 2			
This course is intended as an accelerated version of United States history. The same time periods will be covered, 1890 to present day, but in much greater detail. Economic concepts will also be examined in greater depth. Students should be aware that there is a high degree of independent learning required for this course- not all information will be directly reviewed in class. Students are expected to have already developed high reading comprehension and study skills before taking this course.			
1	Core, NCAA Approved	11	Honors World Affairs and/or Teacher Recommendation

Advanced Placement United States History			
AP U.S. History is equivalent to a two-semester introductory college course in U.S. history. In AP U.S. History, students investigate significant events, individuals, developments, and processes in nine historical periods from approximately **1491 to the present**. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections. **Students desiring to take this course must have excellent reading ability, writing skills, and academic achievement.** The instructional approach is a thematic one, which seeks to develop skills in the analysis and evaluation of historical sources.Summer assignments may be given. There are no prerequisites for AP U.S. History. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. Students may earn college credit by taking the Advanced Placement Examination in American History at the conclusion of this course. (Weighted Grade Course)			
1	Core NCAA Approved	11	Honors World Affairs and Teacher Recommendation

Problems of Democracy (POD) 12
This course is designed to provide students with a working knowledge of the basic goals of the Constitutional Framers, giving students an understanding of the purposes of the American political system, the essential structures (or institutions) within the American political system, the behavior (broadly defined) of the actors within the American political system, the purpose and performance of the linkage institutions in the United States (possibly including political parties, elections, and interest groups), and the types of policies that are often produced by a system with the characteristics of those found in the United States.

1	Core, NCAA Approved	12	None

CHS American Politics/A.P. Government (College in High School, University of Pittsburgh)			
Advanced Placement Government & Politics will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. Data, theories, and government concepts will be interpreted and analyzed. (Weighted Grade Course)			
1	Core or Elective NCAA Approved	12	Honors/AP US History and Teacher Recommendation

Advanced Placement Human Geography			
AP Human Geography is an introductory college-level human geography course. This course attempts to explain the "WHY of WHERE" focusing on why humans live where they do and how geography impacts their interactions with their surroundings. Students cultivate their understanding of human geography through data and geographic analyses as they explore topics like patterns and spatial organization, human impacts and interactions with their environment, and spatial processes and societal changes. Methods within this course would include various forms of instruction and investigation, with student assessments in the form of exams, free response questions, discussions, simulations, and explorations of global development. The course is vocabulary heavy and students should expect readings and homework on a regular basis.			
1	Elective NCAA Approved	10, 11, 12	Honors World Affairs and Teacher Recommendation

Introduction to Psychology			
The objective of this elective course is designed to encourage students to explore their interest in the field of psychological relationships. Topics of inquiry include but are not limited to: Methods of Psychology, States of Consciousness, Principles of Learning, Memory and Information Processing, Human Development, Personality Exploration.			
.50	Elective, NCAA Approved	10-11-12	None

Sociology
This course is an introduction to the study of society through the critical analysis of social relations, behavior, and organization. It is designed to facilitate students to develop a broad knowledge of how social structures and human behavior influence each other, as well as to identify the issues that arise from such interactions. In order for students to critically analyze contemporary social issues and problems, such discussions will focus on the dimensions of race, class, and gender. No prior knowledge of sociology is expected.

.50	Elective, NCAA Approved	10-11-12	None

Modern Dilemmas			
Modern Dilemmas is an elective course available to high school students who wish to explore controversial current event problems and issues. Students will analyze dilemmas that challenge our society and evaluate their successes, failures, and ramifications utilizing research, formal debates, roundtable discussions, mock trials, and quality participation. Upon completion of the course the learner will have the ability to make responsible civic decisions.			
.50	Elective NCAA Approved	10-11-12	Requires maturity; teacher recommendation

Foundations of Law			
This comprehensive 18-week course introduces students to the fundamental principles of the American legal system and the role of law in a democratic society. Students will move beyond simple definitions to explore the complex relationship between law and morality, the nuances of human rights, the framework of law, the judicial process, and criminal and civil justice			
.50	Elective	10-11-12	None

American Conflicts			
The semester-long course will explore American military engagements of the late 20th and early 21st centuries, covering approximately 50 years of U.S. military involvement. The objective of the course will be to analyze not only our military goals during these conflicts, but to also evaluate the political objectives and social climates of those eras. We will attempt to incorporate the best primary sources available by hosting guest speakers from as many of these conflicts as we can to provide students with first-hand accounts of their service. Weaponry and tactics will also be analyzed as a foundation for the class is forged with an overview of the two main theories of warfare. Each conflict will then be analyzed through this prism starting with Southeast Asia then working chronologically through the Iranian Hostage Crisis (1979), Lebanon and Grenada in the early 1980s, Panama and the Gulf War at the turn of the decade, through the humanitarian / peacekeeping missions in the mid-1990s and finally concluding with the current War on Terror.			
.50	Elective, NCAA Approved	9-10-11-12	None

Genocide Studies: The Holocaust
Examine and analyze the notion of human rights violations and genocides in the 20th century through the use of a case study on the Holocaust. The course will commence with an investigation on the notion of basic human rights with an emphasis on its definition as well as subsequent violations throughout the 20th and 21st century and will continue with an examination of the definition of genocide in the mid-20th century. The focus of the course will be given to studying the Holocaust including its origin, course, and conclusion, providing a framework for the examination of other genocides and human rights violations taking place throughout the world currently. The examination into the Holocaust will take place from the following angles: targets, attackers, escalation, annihilation, victims, homelands, onlookers, and aftermath in conjunction with the following questions: Why the Jews? Why the

Germans? Why murder? Why this swift and sweeping? Why didn't more Jews fight back more often? Why did survival rights diverge? Why such limited help from outside? What legacies, what lessons? The course will culminate as students investigate current conflicts to determine if they qualify as a genocide given the UN definition, as well as the correct course of action to take for said conflicts.			
.50	Elective NCAA Approved	10-11-12	None; maturity for nature of subject focus

TECHNOLOGY EDUCATION/ENGINEERING

CHS Introduction to Engineering Design (College in High School, RIT)			
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work. Students will have the opportunity to earn college credit at the completion of this course. Students may take this course for college credit through the Rochester Institute of Technology (Weighted)			
1	Evolving Technology or Elective NCAA Approved	10-11-12	Algebra I

CHS Computer Integrated Manufacturing (College in High School, RIT)			
Computer Integrated Manufacturing (CIM) deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. Throughout the course students learn about manufacturing processes and systems. The course culminates with a capstone project where students design, build, program, and present a manufacturing system model capable of creating a product. Students may take this course for college credit through the Rochester Institute of Technology (Weighted)			
1	Evolving Technology or Elective	10-11-12	Algebra I

Manufacturing Technology (Making)			
Manufacturing Technology is a course developed for students to design and create projects using various means of manufacturing. Students will be re-taught all of the general woodworking tools as a foundation for success. The majority of focus will be placed on product design and development for automated manufacturing. All automated equipment will be taught in great detail so that each and every student will have the ability to become certified to run the equipment. Pieces of equipment include the following: 1.) all traditional woodworking equipment, the 3d Printers, the laser engraver, the CNC router and the HAAS Mini Mill. This is a class with the general maker in mind.			
.50	Evolving Technology or Elective	9-10-11-12	None

Additive Manufacturing			
This course was designed to further develop skills related to additive manufacturing in a high-quality project based class. Students will learn the skills, apply those skills on a standard project and then build on them with projects of their own. The intention is to develop industry standards in additive manufacturing and partner with industry to further refine our knowledge and skills. Students would have the opportunity to take the NOCTI test at the end of the course. Some units of study and class elements include intro to design/CAD, advanced product design, competition, student portfolios, and printer builds. A future component may include producing items and products for the school and/or Lopes Lounge.			
.50	Evolving Technology or Elective	9-10-11-12	None

Intro to Drone Systems (Drones 101)			
This course will provide the foundation for advanced exploration in flying, aerospace engineering, and unmanned aircraft systems (drones). Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will explore modern innovations and develop innovative ideas to address the aviation industry's real-world challenges. They will be exposed to various career options in drone operations and take an in-depth look at available opportunities. AOPA Curriculum-based course. Can apply for Drone licensure at 16 years old.			
.50	Core or Elective	9-10-11-12	None

WORLD LANGUAGES

French I			
This course is an introduction to the spoken and written language, focusing on vocabulary building, basic grammatical concepts, and general self-expression, while exploring the practices and culture of Francophone countries.			
1	Elective, NCAA Approved	9-10-11-12	None

French II			
This course continues to build upon the reading, writing, speaking, and grammatical skills from French I while introducing more complicated grammatical features and strengthening the student's ability to complete more complex written and spoken tasks.			
1	Elective, NCAA Approved	9-10-11-12	French I

French III

This course focuses on mastering the skills of French I and II while introducing more complex grammatical features and tenses to aid students in self-expression, narration, and description.			
1	Elective, NCAA Approved	10-11-12	French II

CHS French (College in High School, University of Pittsburgh)			
This course is an intermediate-level college French course designed to give students productive and interpretive proficiency in the language. Emphasis is on contextualized development of all four skills: speaking, writing, listening, and reading.(Weighted Grade Course)			
1	Elective, NCAA Approved	12	French III

Latin I			
This course includes a study of basic vocabulary with an emphasis on English derivation and grammar used in reading, speaking, and composing Latin. This course focuses on developing reading proficiency and an understanding of ancient Roman culture. Grammatical structures, vocabulary building, and oral and written translation skills are emphasized.			
1	Elective, NCAA Approved	9-10-11-12	None

Latin II			
This course continues the study of vocabulary, culture, and grammar used in reading, speaking, and composing Latin. This course focuses on developing reading proficiency and an understanding of ancient Roman culture. Grammatical structures, vocabulary building, and oral and written translation skills are expanded upon the concepts of Latin I.			
1	Elective, NCAA Approved	9-10-11-12	Latin I

Latin III			
This course continues the study of vocabulary, culture, and grammar used in reading, speaking, and composing Latin. This course focuses on developing reading proficiency and an understanding of ancient Roman culture. Content includes an introduction to prose composition and poetry. Grammatical structures, vocabulary building, and oral and written translation skills are expanded upon the concepts of Latin II.			
1	Elective, NCAA Approved	10-11-12	Latin II

CHS Latin (College in High School, University of Pittsburgh)			
This course is an introduction to Latin poetry. Students will read selections from Books I, II, and IV of Virgil's epic, **The Aeneid**, a poem that tells the amazing story of a band of Trojan refugees and their leader, Aeneas, who are searching for a new homeland. In the readings, close attention is paid to diction, style, meter, narrative technique, and the conventions of the ancient epic. Students also will read the whole poem in English for in-class discussion.. (Weighted Grade Course)			
1	Elective, NCAA Approved	12	Latin III

Mandarin Chinese I			
Mandarin Chinese is an introduction to the spoken and written language, focusing on vocabulary building, basic grammatical concepts, and general self-expression.			
1	Elective, NCAA Approved	9-10-11-12	None

Mandarin Chinese II			
Mandarin Chinese II is an intermediate-level course that continues to fine-tune the skills from Mandarin Chinese I while introducing more complicated grammatical features and strengthening the student's ability to complete more complex written and spoken tasks.			
1	Elective, NCAA Approved	9-10-11-12	Mandarin Chinese I

Mandarin Chinese III			
Mandarin Chinese III is an advanced-level course that builds on oral and written communication from Level II while introducing more complicated grammatical features and strengthening the student's ability to complete more complex written and spoken tasks.			
1	Elective, NCAA Approved	11-12	Mandarin Chinese II

CHS Chinese (College in High School, University of Pittsburgh)			
This class will use Integrated Chinese Level 1 Part 1 as the primary textbooks used for the Chinese CHS course at Avonworth High School. Students will complete lesson 1 to lesson 9 in the textbook, workbook, and character workbook to meet the requirements for Pitt's Chinese 0001 course. Besides the materials in this textbook, there is also a collection of readers that cover current events (news), short passages, articles and literature, cultural festivals, historical stories, Chinese philosophy from Chinese newspapers, online resources, and books. Chinese movies, documentaries, TV shows, as well as songs in Chinese, are also going to be covered more or less. The whole course is taught and all activities throughout the course are conducted only in Mandarin Chinese. After students complete this course, they will be allowed to take a final examination for the CHS Chinese course to get 5 credits from Pitt's. (Weighted Grade Course)			
1	Elective, NCAA Approved	12	Mandarin Chinese III

Spanish I			
Spanish I introduces many important and fundamental aspects of the Spanish language, concentrating on vocabulary building, basic grammatical concepts, and general self-expression. Students develop listening, speaking, reading, and writing skills in Spanish while exploring the culture of the Spanish-speaking world.			
1	Elective, NCAA Approved	9-10-11-12	None

Spanish II
Spanish II reviews the vocabulary and structures of the Spanish language presented in Spanish I and builds on these concepts to reinforce and enhance the students' verbal and written skills. In addition, the study of Hispanic culture befits as an integral part of language learning.

1	Elective, NCAA Approved	9-10-11-12	Spanish I

Spanish III			
Spanish III students integrate language topics from the first two levels of Spanish with advanced grammar lessons and practical vocabulary units to improve their listening, speaking, reading, and writing skills. An introduction to Hispanic short stories is included at this level as a way to foster and cultivate cultural awareness.			
1	Elective, NCAA Approved	10-11-12	Spanish II

CHS Spanish (College in High School, University of Pittsburgh)			
CHS Spanish is the continued advanced study of the Spanish language with flexible and important topics while highlighting on expanding vocabulary acquisition, increasing grammar proficiency, writing and listening skills, reading and discussing works of recognized Hispanic authors, short stories, and current magazine and newspaper articles. Cultural connections and cultural awareness are emphasized through all aspects of language study. (Weighted Grade Course)			
1	Elective, NCAA Approved	12	Spanish III

GENERAL ELECTIVES / EXPERIENCES

Freshman Seminar			
Freshman seminar is a semester course required of all 9th graders. This course is intended to prepare students for high school by focusing on personal interests and passions and prepare students for the world around them. Topics of study will include Internet safety, career exploration, diversity, drug & alcohol support, positive life choices, personal growth, mentoring/advising program, habits of mind.			
.50	Graduation Requirement	9	None

Research Seminar			
Research Seminar is a personalized elective that will allow students to pursue an interest that is not part of the regular curriculum, essentially “BYOC - Build Your Own Course.”. Students will generate a research/driving question, conduct a literature review, collaborate with content experts, develop a hypothesis or solution, and present findings/projects in a research symposium. The nature of the course is project-based. The course will be offered in a blended environment that will include flexible face-to-face instruction, blended online instruction, and off-campus excursions with project partners.			
.50 or 1	Elective	11-12	None

Experience Based Learning Opportunity

Students may complete a district-approved Experience-Based Learning Opportunity (ELO) to earn a half elective credit (.50) or up to 2 credits during junior and/or senior year. Experience-Based Learning Opportunities may vary in structure, scope, and intensity including internships but all must meet the following criteria for approval and to earn credit:

- 60 hours (or the equivalent) of onsite or experiential learning as determined by the site administrator and a district representative. Hours must be logged and signed off by the site supervisor and district representative
- Be approved by the school district (either as an affiliated program or individually approved plan)
- Result in a district-approved culminating artifact that could include a written reflection, presentation, portfolio or demonstrated competence

.50 or 1	Elective	11-12	Approval Process

Work Study Program

In unique circumstances, students may pursue work hours during a portion of the school day. This decision is made between students, parents, and counselors. This is an individual decision and must be a healthy and active decision for a motivated and driven student seeking this collaborative experience. This opportunity is only if the remainder of graduation requirements are met and cannot be in lieu of required electives.

- 90 hours of work time equats to .5 elective credit
- 180 hours of work time equates to 1.0 elective credit
- 360 hours of work time equates to 2 elective credits
- Hours must be logged and then approved by a school administrator and/or counselor
- Students keep a log of work hours and must be able to provide a pay stub for verification of hours worked
- Additional “real life” assignments will be required each quarter through Work Study Google Classroom

.50, 1, or 2 credits	Elective	11-12	Approval Process & Counselor Conversation

Teaching Assistant (Capstone Experience)

Students may apply to become a teaching assistant in a high school course that they have successfully completed. An application process will begin in May and students can work with teachers to find an appropriate placement for the year ahead. Not all applying students will be able to pursue this option due to scheduling constraints and class options. Teaching assistants often serve as interactive mentors to students in the current classes. Current teaching assistants can support students, assist with instruction, and tutor in appropriate situations but may not provide grading or evaluation.

.5 or 1	Elective	10,11,12	Approval Process

Independent Study Program

Purpose

Independent study is designed for students who are motivated to pursue a subject at their own pace without day-to-day instruction by a teacher and *who have demonstrated exceptional interest in the subject matter and evidence of academic achievement.* Though designed primarily for students who want academic enrichment, independent study may be recommended for students who have encountered scheduling conflicts for required courses, attendance at AWBCC or academic deficiencies.

Independent study is not meant as a substitute for a teacher and daily instruction, so students should carefully consider their instructional needs and learning styles when weighing this option. It is also not meant to resolve scheduling conflicts for all situations. Independent study shall be granted under individual circumstances to enhance a student's learning experience.

Scope

An independent study program requires special effort and commitment on the part of the student, parent, and school to meet the individual educational interest of the student. Although students are encouraged to pursue independent study opportunities consistent with the mission statement of the district and the purpose of the independent study program, the district recognizes that not all curricular areas are well suited to this option because the courses involve significant direct instruction, hands-on activities, labs, and/or collaboration among the teacher and students.

No department or teacher will be required to participate in an independent study; participation is strictly voluntary. On-site opportunities exist in the following departments: English, Social Studies, Humanities, and Foreign Languages (advanced coursework only). However, a student may still pursue an opportunity with a teacher even if that teacher's department is not listed here. Additionally, students may work with their School Counselor to pursue independent study possibilities in all disciplines. If a student desiring an independent study is unable to find a teacher to volunteer, the student may explore taking the course, at his or her family's expense, through either an approved online program or an off-site classroom experience.

Eligibility Requirements

- Students have shown evidence that they will work independently to complete the program assignments
- Students have successfully completed the application and agreement process

Independent Study Guidelines

Independent study may be requested only if the student:

- has exhausted the course offerings in a particular department, or
- desires to complete a course not offered by the high school, or
- is unable to schedule a course required for graduation, or
- is unable to schedule an elective course, *which is in a sequence of electives previously begun by the student,* only if it is in conflict with a required course (The student also must have demonstrated an inclination for the elective area through prior academic achievement. Entry level electives are not eligible for independent study.), or
- has other exceptional circumstances as determined by the Director of Student Services

Application Process

Independent study application forms can be obtained by the student in the counseling office. Independent study applications should be completed and returned to the student's school counselor no later than April 30th in the year

prior to completion of the independent study. Applications will be judged and approved on academic rigor and relevance. Any application received after April 30th may be rejected for budgetary, programmatic, or staffing reasons. A completed application consists of the application form and the components in the format listed below and the Independent Study Agreement.

Developing the Independent Study Agreement using Avonworth Resources

In collaboration with the sponsoring teacher, each student requesting an independent study must complete a written agreement that follows this prescribed format by providing the following information:

- Rationale for requesting this independent study
- Detailed explanation of how the independent study will meet the course objectives
- Timeline for completing the learning experiences, activities, and assessments in conjunction with the written planned course
- Resources needed to complete this independent study (e.g.: personnel, printed materials, lab space, equipment, etc.)
- The student and sponsoring teacher must also arrange a meeting with the school counselor and parent/guardian to review the application and determine if all of the criteria have been met. Also, completed agreements must be submitted with the application.

Financial Obligations

All materials and mentor stipends for independent studies occurring on-site at Avonworth will be paid for by the district. For any independent study using non-Avonworth resources, it will be the student's family's primary responsibility to pay for all costs (i.e.: tuition, materials) except the mentor stipend, which will be the district's responsibility.

Approval Process

Independent study applications and agreements (applicable to both required and non-required graduation credit courses) must be reviewed and approved by an Independent Study Review Committee. For applications submitted by April 30th, the student will be notified of acceptance by May 31st in the year prior to completion of the independent study. Completed applications will be stored in the student's permanent record file in the counseling office.

Appeals to the committee's decision must be made to the committee within three (3) school days after being informed of the decision. The committee will review the appeal and notify the student of its decision. Once the committee rules on the appeal, the decision is final. The approved packet will then be forwarded to the Assistant Superintendent and Superintendent.

Independent Study Review Committee

The four-member Independent Study Review Committee is composed of the mentor teacher, a teacher in the content area, a school counselor, and principal.

Roles and Responsibilities

Students interested in independent study are responsible for the following:

- Meeting the eligibility requirements
- Obtaining commitments from a teacher(s) of that subject or discipline who will agree to sponsor the

independent study
- Completing an application form for independent study no later than April 30th in the year prior to completion of the independent study
- Completing a proposal for independent study following the prescribed format and with the assistance and approval of the sponsoring teacher no later than April 30th in the year prior to completion of the independent study

Once a teacher agrees, he/she assumes the responsibility for supervising the structure and maintenance of the independent study to ensure educational accountability.

Their responsibilities include the following:
- Be a member of the student's Independent Study Review Committee
- Review a completed proposal to determine its feasibility
- Provide written and/or verbal feedback and counsel to the student on a regular basis, including, at a minimum, interim and quarterly reports
- Submit a final grade to the student's Independent Study Review Committee

* Note: The section on teacher roles and responsibilities does not apply if it is an offsite course.

Independent Study Review Committee is responsible for the following:
- Reviewing each application and contract proposal
- Determining approval or disapproval of studies presented by May 31st in the year prior to completion of the independent study.
- Hearing appeals of disapproved studies and rendering a final decision
- Providing final approval to proceed with the independent study as agreed
- Verifying successful completion of Independent study

Facilitator of the Independent Study Program shall be the counselor and shall be responsible for the following:
- Promoting and communicating the Independent Study Program to students and parents
- Working with students, parents and teachers, as appropriate, to facilitate and coordinate identification of and application for independent study options
- Stewardship of the application review process
- Identification of and application for applicable grant funding

Meeting Timelines

Independent study deadlines and/or checkpoints not met may cancel or invalidate the agreement. The four-member Independent Study Review Committee must review and approve the evidence presented at the close of the course.

All approved independent study requirements must be completed no later than the 80th day of the semester.

Grading and Credits After the teacher submits the student's grade, final awarding of credit for a completed independent study is made by the principal in consultation with the Independent Study Review Committee. Students may contract for no more than ½ credit of independent study per semester or for more than two total credits in their four years of high school.

No grades or credit will be given for incomplete work or failure to comply with agreements.

(application below)

Independent Study Application Form

Section I: *Complete the information below, including parent/guardian signature.*

Student's Name: _____ Grade: _____ School Year: _____

Name of the proposed independent study course: _____

Type of independent study: (check one) On Site _____ Outsource (online or university) _____

Length of independent study request (check one): Full-year _____ Semester I _____ Semester II _____

Parent/Guardian Permission: I have read and understand the requirements for independent study for my child, and am aware of my obligation to meet with my child's school counselor to review the completed application prior to submission.

Parent/Guardian Signature: _____ Date: _____

Section II: *Compile the following information and provide it to the school counselor during the application review meeting.*

- Rationale for requesting independent study
- Detailed explanation of how the independent study will meet course objectives
- Timeline for completing learning experiences, activities, and assessments in conjunction with the written planned course
- Resources needed to complete independent study (e.g.: personnel, printed materials, lab space, equipment, etc.)
- Student's current schedule

Section III: *Submit application packet to school counselor by April 30th of the year prior to independent study.*

Date of final application submission: _____ Received by: _____

Section IV: *Independent Study Review Committee Decision and Signatures*

Accept Application: _____ Reject Application: _____ Date: _____

Sponsoring Teacher: _____ Date: _____

School Counselor: _____ Date: _____

Content Area Teacher: _____ Date: _____

Principal: _____Date: _____

Assistant Superintendent: _____Date: _____

Section V: Superintendent's Use Only:

Grade: _____ Credit: _____ Date Recorded: _____ Recorded By: _____

A.W. Beattie Career Center

A.M./Morning Session	**No. 0505**
P.M./Afternoon Session	**No. 0605**
Grades 10, 11, 12	**Credit 3.0**

A.W. Beattie Career Center
Admissions Information

All consortium secondary students are welcome to apply for enrollment in an advanced career pathway program at A.W. Beattie Career Center during their sophomore, junior or senior year. Enrollment is an

open process in all available career programs. In the event that a career program has reached the maximum enrollment based on safety or by Joint Operating Committee action, new student enrollment will be determined by implementing the five (5) year average daily enrollment effective March 1st of the prior school year. In addition to the average daily enrollment, the sending school may also implement the student evaluation rubric to determine admission to a high demand program. No new enrollment will be accepted after the 10th day of the first semester, unless the student has prior education experience within a career center.

All A. W. Beattie Career Center Programs offer advanced college credit upon successful completion. Potential college credits range from three to twenty credits.

A.W. Beattie Career Center Programs are approved Programs of Study (POS) providing for seamless transition to post-secondary education through rigorous content aligned with challenging academic and relevant career context in a non-duplicative progression of courses aligned to post-secondary education. SOAR is a Pennsylvania program which allows CTE students to earn free college credits. Students earn free credits with a qualifying score from the NOCTI Senior year assessment and confirmation that they have completed the entire CTE program of study. To obtain these free credits, students must submit the proper paperwork to the college, as outlined below. This paperwork requires CTE administrative signatures for submission.

To determine the free credits offered for Pennsylvania Career and Technical Educational Programs of Study (POS) visit the website http://www.collegetransfer.net/. After selecting your Program of Study and your high school graduation year, you can view all the colleges offering free credits for your particular CTE program.

Additionally, A.W. Beattie Career Center maintains many college articulation agreements, along with dual enrollment and pre-apprenticeship opportunities for students. Please visit our website www.beattietech.com for additional information.

Students who attend A. W. Beattie may be eligible to earn credits toward graduation requirements. Please see your Counselor for additional information.
Several of A. W. Beattie's programs require uniforms and equipment. The student and parents assume this cost. Therefore, students should obtain accurate cost information before enrolling for a course.

Transportation is provided by the School District.
Applications to attend A.W. Beattie Career Center should be made during the second semester of the 9th, 10th or 11th grade and will be carefully reviewed. Further information regarding enrollment in A. W. Beattie Career Center program's is available in your high school Counseling Office.

Programs:

Advertising Design
Automotive Collision Technology
Automotive Technology
Carpentry/Building Construction
Cosmetology
Culinary Arts
Dental Careers
Early Childhood Education
Health and Nursing Sciences
Heating, Ventilating, & Air Conditioning Tech.
Network Engineering/Cyber Security
Pastry Arts
Pharmacy Operations (11th 12th Grade Only)
Robotics Engineering Technology
Sports Med/Rehab Therapy & Exer. Sci.Tech
Surgical Science

Emergency Response Technology Veterinary Science Technology

Explanation of Programs:

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

Automotive Collision Technology – The nationally recognized Inter-Industry Conference on Auto Collision Repair (I-CAR) is utilized in the Automotive Collision Technology program at A.W. Beattie Career Center. The I-CAR curriculum provides strict Industry standards supporting students with hands-on experience using equipment in our state-of-the-art auto collision lab. The Automotive Collision Technology program trains students in all aspects of the industry including: MIG Welding, computerized paint mixing, and automotive spraying techniques. Using the latest technology in our fully equipped auto collision shop keeps students up to date with current standards. Cooperative education experiences with local area employers provide necessary hands-on training outside the classroom.

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

Carpentry/Building Construction – Students in this PBA (Pennsylvania Builders Association) endorsed program will receive classroom and hands-on training in carpentry, masonry, plumbing, residential wiring, and building a home for sale. Students also have the opportunity to join SkillsUSA where they can be involved in activities and competitions, as well as community projects that challenge the student during the year, preparing them for immediate employment. Students also have the opportunity to experience live work by taking part in the on-going project of building a modular home. Additionally, students will gain experience in the operations of forklifts, scissor lifts and industrial rigging systems.

Cosmetology – The A.W. Beattie Training Salon provides qualified Cosmetology students with the opportunity to use their energy, skills, and imagination on clients from the community in a state-of-the-art cosmetology salon. Students will study the care of hair, nails, and skin. They will learn the proper use of cosmetology tools and equipment, as well as techniques in hair cutting, styling, coloring, permanent waving, relaxing, manicuring, pedicuring and skin care. Students will also focus on professionalism and customer relations and test for their Pennsylvania State Cosmetologist License when they have completed 1,250 hours of training.

Culinary Arts – The Culinary Arts program has built a reputation as one of the finest throughout the state. The A.W. Beattie Restaurant, given a three-star rating by the Post-Gazette, is student-run and serves breakfast and lunch to more than 180 people a day! The Bake Shop sells cookies, brownies, pies,

cakes, and various pastries. Students learn all aspects of the restaurant business from meal planning, food preparation, baking and carving, to dining room management and banquet serving. There are many employment opportunities within the always-growing culinary industry. In this program, students practice their craft in a state of the art commercially equipped kitchen and bakery.

Dental Careers – Dental Careers provides students with the necessary skills for employment in Dental Assisting, Lab Technician, Infection Control Assistant, and many more opportunities within the dental industry that extend into a jumpstart for post-secondary education. Seniors participate in hands-on work experiences in dental offices, learning and assisting in four-handed dentistry, chair-side assisting, administrative skills and other techniques. Students will prepare to test for their PA Dental Radiology Certification. Students learn the latest techniques including digital x-ray.

Early Childhood Education – Qualified Students in Early Childhood Education (ECE) experience the opportunity to apply their child development and teaching skills daily, working with children in the on-site Kiddie Tech Child Care Center. In addition to a variety of classroom activities, students learn hands-on with infants, toddlers, and preschool age children. Students present a series of learning and developmental activities in the childcare facility, practicing and refining their creative teaching skills, as well as learning the basics in caring for and managing children. In partnership with Junior Achievement, students have the opportunity to teach in classrooms in local school districts. Additionally, through a pre-apprenticeship agreement with Carlow University, ECE students have the opportunity to earn transferable college credits.

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

Health and Nursing Sciences – Today's medical field is rapidly growing. Now, more than ever, health care professionals are in high demand and are essential employees. These professions include Patient Care Technicians, Nursing Assistants, Medical Assistants, EKG Technicians, Phlebotomy Technicians, Registered Nurses, Nurse Practitioners, Physician Assistants, etc. The Health and Nursing Sciences core curriculum will prepare students for future success in the healthcare industry. Students will have the opportunity to obtain many health care certifications. These include, but are not limited, to First Aid, CPR, Stop the Bleed, and Patient Care Technician. During the program, students will learn and develop essential hands-on clinical skills that are imperative for said health care professions. Students will also have the opportunity to engage in clinicals in a nursing home, hospital, and/or doctor's office setting. This will allow students to experience health care professionals in action and help students identify which career they want to pursue in health care.

Heating, Ventilating, and Air-Conditioning – Prepares students with the necessary skills to become qualified technicians and mechanics in the HVAC field. Students learn heating installation and service, air-conditioning. Installation and service, plumbing, electrical wiring, refrigeration, and sheet metal fabrication. Qualified students have the opportunity to participate in Cooperative Education experiences outside of the classroom. They will test for their EPA Certification at A.W. Beattie Career Center, helping them to ensure immediate employment opportunities. Additionally, students will gain experience in the operations of forklifts, scissor lifts, and industrial rigging systems.

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

Pharmacy Operations – The Pharmacy Operations program will provide 11 th and 12 th grade students the opportunity to jumpstart their post-secondary training and work towards a career with increased employment opportunities over the next ten years. Students will learn compounding formulas and ratios, laws and regulations, participate in module lab work, practice sterilization skills, and demonstrate proficiency as required by industry standards. Student instruction includes the PassAssured interactive pharmacy training and test preparation for the Pharmacy Technician Certification exam. Students will participate in mock simulations and gain hands-on experience within the community. The program is limited to 11 th and 12 th grade students.

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

Robotics Engineering Technology (RET) – Students interested in the most recent, innovative technology has an opportunity for training in Robotics Engineering Technology. Through a partnership with the Advanced Manufacturing Industry, California University of Pennsylvania, and support from Carnegie Mellon University, students move through in-depth activities into advanced design and control challenges using curriculum developed through the National Robotics Engineering Center. Due to the broad application of Robotics, numerous employment opportunities exist in the Pittsburgh area and nationally. Students also develop skills related to Advanced Manufacturing with CNC, FANUC Robotic Arm, and 3-D modeling. The RET program at AWBCC is endorsed by the Advanced Robotics Manufacturing Institute (ARM) which provides additional industry supports and resources that go beyond the classroom. Only programs that meet the highest standards set by the robotics industry in the categories of relevance to the industry, effective curriculum, efficiency of training, impact of the program, program sustainability and transportability can earn the ARM endorsement.

Sports Medicine – Rehab Therapy and Exercise Science Technology (SMART-EST) – The SMART-EST Program is designed for students that are looking towards the fields of: physical therapy, occupational therapy, physical rehabilitation, exercise physiology, and sports medicine. Students will develop valuable skills in diagnosis, differential diagnosis, assessment, and prevention, along with

prognosis and the rehabilitation of bodily injuries and related health conditions. Students will learn the therapy and application principles of a patient care plan including: assessment, evaluation, interventions of exercise, manual therapy, modalities, and neuro re-education. Students will also develop goal setting and discharge plans for patients. Students will participate in nutrition understanding, as they learn how to develop proper diet plans for healthy individuals, and they will learn how to tailor diet plans for special populations. Students participating in the SMART-EST Program could be a Personal Trainer/Coach and Physical Therapy Aid out of high school. The program provides a core base that a student may build a post-secondary degree or advanced certification upon.

Surgical Sciences – The Surgical Sciences program is designed for students that are looking towards a career in surgery such as: Sterile Processing, Surgical Technology, Surgical Physician's Assistant, Surgical Anesthesia, Surgical Perfusionist, Surgical Sales Representative, Operating Room Nurse, or Surgeon. Students will develop valuable skills in sterile processing, surgical set up and instrumentation, surgical procedures, anatomy, and physiology, and more. Students will learn the full surgical patient path, starting from diagnosis to recovery. They will learn how to set up and sterilize surgical instrumentation, as well as set up, and management of a surgical sterile field. Students will learn surgical assisting, as well as the roles of the additional staff in an operating room. Students will learn to critically think, as well as manage themselves and others in tense or crisis medical situations. They will work on professionalism, interview skills, and be encouraged to explore career paths that interest them. The program provides a core base advantage that a student may build a post-secondary degree, as well as equip them to enter the workforce in Sterile Processing Departments with a significant edge over other applicants.

Veterinary Sciences Technology – Students enrolled in A.W. Beattie's National Association of Veterinary Technicians in America (NAVTA) approved Veterinary Science program will experience a wide variety of care and management techniques throughout the program. They will gain a solid foundation in the Veterinary Sciences program on which to build a post-secondary degree and entry level employment skills. Students will learn to maintain medical records, schedules, offer client education, explore authentic laboratory procedures, and assist with nursing and preparation for surgical duties; along with routine exams. They will learn how to execute basic animal examinations with dogs, cats and smaller animals brought in by instructors and staff. See your school counselor to sign up for a tour and apply for the program.

Certifications

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

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

Student Success Center

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

Accreditation:

A.W. Beattie Career Center meets all requirements as established by the PA Department of Education under the guidelines of Chapter 339. The A.W. Beattie Career Center is the first recognized United States Department of Education Green Ribbon School Award Recipient Career Center in Pennsylvania.

A.W. Beattie Career Center for more information.
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A.W. Beattie Career Center does not discriminate on the basis of race, color, age, creed, religion, sex, sexual orientation, ancestry, national origin, handicap/disability, gender identity or expression, or genetic information in its programs or activities.