

**Avonworth High School  
Course Description Book  
2024-2025  
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: February 13, 2024

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Dr. Ashlea Rineer-Hershey, Director of Student Services  
Mrs. Kristen Butler, Director of Human Resources

Dr. Keera Dwulit, High School Principal  
Dr. Kaitlin Remensky, Assistant Principal

Dr. Lisa Maloney, Ed.D., School Counselor (Future Ready Coordinator)  
Mr. David Como, M.Ed., School Counselor (Academic Grades 11&12)  
Mrs. Nicole Levis, M.Ed., School Counselor (Academic Grades 9&10)

Dr. Kristina Busti, District Psychologist  
Mrs. Colleen Barcaskey, RN, School Nurse

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 1973. 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 Director of Student Services, 1310 Roosevelt Road Pittsburgh, PA 15237 at 412-366-7171.

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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**

<b>Subject</b>	<b>Number Units</b>	<b>Subject</b>	<b>Number Units</b>
English	4	Physical Education +Health	1.50
Social Studies	3	9th Grade Seminar	.50
Mathematics	3	Art/Humanities	.50
Science	3	Personal Finance	.50
Core Flex Credit	1	Technology	.50
Electives	7	Computer Programming	.50
		<b>Total Credits</b>	<b>25.00</b>

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 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 these- 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 grade-level counselor for more information about financial assistance.

**Integrated Arts:** These courses offer students the opportunity to dive deeply into the content of several courses while developing presentations, collaboration and critical thinking skills. 9th grade students can elect to earn an English and Social Studies credit by taking Honors Integrated 9. 10th grade students can elect to earn an English, Social Studies and Art credit through Honors Integrated 10. **These courses are not running in 2024/2025 school year.**

**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.

### **Technology Credit**

All technology education courses, programming courses, and computer art courses (computer graphics, videography, game design, etc.) may be used for the technology credit. In addition, the English courses in journalism may also satisfy the technology credit. Select A.W. Beattie Career Programs are acceptable. Please contact a School Counselor with individual concerns.

*Students must have one-half credit each for arts and technology. One course may not serve both requirements.*

### **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.

### **Promotion**

A student should successfully complete at least 6.5 units in grade 9 to be promoted to grade 10.

A student should have successfully completed at least 13 units in grades 9 & 10 to be promoted to grade 11.

A student should have successfully completed at least 19 units in grades 9, 10, & 11 to be promoted to grade 12. Students may carry a minimum of six credits in a school year. 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.

### 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.

### Graduation Project

All students who intend to graduate from Avonworth High School must meet the requirements of the Graduation Project. The goal of the project is to showcase students' future readiness and connect with both school and community resources, mentors, and opportunities. 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.

**Class of 2025 and Class of 2026:** Students will present their project in a senior exhibition following the project guidelines. The details and project guidance are shared with the students through Advisors using a Graduation Project Google Classroom.

**Class of 2027 and future classes:** Students will begin their Graduation Project 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 throughout the process.

### Grading Scale

<b>Letter Grade</b>	<b>Academic</b>	<b>Honors &amp; STEM Science Courses</b>	<b>Post-Secondary Level - includes AP and CHS course</b>	<b>Percentage</b>
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 courseload 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.

### **Attendance**

Students who are absent eight or more days for a semester course and 16 days or more for a year-long course shall not receive credit for that course if absences are unexcused. In a year-long course, days will accumulate from one semester to the next. In extenuating circumstances, a written appeal may be made to the building principal.

### **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.

After their 10<sup>th</sup> grade year, students will have the option of selecting one of five 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 start of 11th grade.

### **Avonworth Personal Pathways**

1. **Pathway for Innovative Arts & Communications** - Advisor: Mrs. 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. Emily Hickman
5. **Pathway for Science Technology, Engineering & Mathematics** - Advisor: Mr. Greg Wolfe

## 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, Technology, Core, Class or Elective Requirement	Grades Enrolled	Pre-Requisites

### 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.			
.5	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	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	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	Elective	11-12	2 Art courses or teacher recommendation
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<b>Media Arts 1</b>			
This course serves as an introduction to media arts. Students will create projects using programs including Adobe Illustrator, Photoshop, In-Design, as well as tablet based applications such as Procreate. Students will also learn how to properly operate a DSLR camera as well as video and photo editing software such as Lightroom & Premiere Pro. This course focuses on the business side as well as the more creative and free form world of digital art.			
.5	Arts/Humanities or Elective	9-10-11-12	None

<b>Media Arts 2</b>			
This course builds upon the techniques used in Media Arts 1 while adding new software to the student tool box. Students will continue to work in the Adobe suite and Procreate. They will have a chance to begin to animate their media art for the first time as well as build up their DSLR camera skills for photographing and recording. They will be introduced to intermediate editing techniques for both.			
.5	Elective	9-10-11-12	Media Arts I

<b>Media Arts 3</b>			
This course builds upon the techniques used in Media Arts 2. Students will continue to work in the Adobe suite but will be expected to create a more thematic (theme of their choosing) body of work using advanced techniques in Procreate, Lightroom, Premiere Pro, Photoshop & Illustrator. Students will also be introduced to 3-D modeling using Nomad Sculpt in this course.			
.5	Elective	11-12	Teacher Recommendation & 2 Arts Courses

<b>Honors Media Arts (4)</b>			
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	Elective	11-12	2 Art courses or teacher recommendation

<b>Partners Art</b>			
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.			
.5	Elective	11-12	2 Art courses or teacher recommendation

<b>Digital Storytelling through Stop Motion</b>			
Digital Storytelling through Stop Motion is a project-based class that develops an understanding for telling stories through the use of stop motion animation techniques. Students will learn about the history of stop motion, where it started and where it is today. The class will investigate the careers and roles associated with stop motion. This course is designed to introduce students to the techniques and skills used in animation and film production. The class will use Pixar and Laika as our prime examples of where stop motion can take you after high school.			
.5	Arts/Humanities or Technology or Elective	9-10-11-12	Noneban

**BUSINESS**

<b>Personal Finance</b>			
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.			
.5	Graduation Requirement	9 -10-11-12	None

<b>Introduction to Business</b>			
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.			
.5	Technology or Elective	9-10-11-12	None

<b>Entrepreneurship</b>			
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.			
.5	Technology or Elective	11-12	None

<b>Macroeconomics</b>			
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.			
1	Technology or Elective	11-12	Algebra I

<b>Honors Accounting</b>			
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	Technology or Elective	11-12	Algebra II

## **COMPUTER SCIENCE**

<b>Introduction to Computer Programming 1</b>			
This is a project-based course where students will learn the fundamentals of programming, critical thinking and problem-solving skills. No prior programming experience is required. By the end of the course, students will have built their own game (i.e. Geometry Dash, Pacman, etc.) Specific topics include functions, variables, conditionals, testing, and debugging in Python.			
.5	Graduation Requirement NCAA Approved	9-10-11-12	None

<b>Introduction to Computer Programming 2</b>			
This is a project-based course where students will build on a foundation of learning created in Intro to Computer Programming 1. This course allows students more time to create and apply new programming concepts learned in larger, more dynamic games/programs. Specific topics include loops, strings, lists, return values, testing, and debugging in Python.			
.5	Technology or Elective NCAA Approved	9-10-11-12	Intro to CP 1

<b>Introduction to Computer Programming with Python (College in High School)</b>			
The focus of the course is on problem analysis and the development of algorithms and computer programs in a modern high-level language. In the Python language, students learn fundamentals of computer programming: variables, operators, console & file I/O, ifs, loops, functions, lists, and classes. Students have the opportunity to enroll in CS 0012 at the University of Pittsburgh for college credit.			
.5	Technology or Elective NCAA Approved	10-11-12	Intro to CP 1

<b>Intermediate Programming using Java (College in High School)</b>			
This is an intermediate course focusing on object-oriented programming and other fundamental programming concepts utilizing the Java programming language. Topics include fundamentals, classes, arrays and array lists, searching and sorting algorithms, inheritance and polymorphism, GUIs, recursion and linked lists. Students are expected to have some previous programming experience prior to taking this course. Students have the opportunity to enroll in CMPINF 0401 at the University of Pittsburgh or take the AP Computer Science A Exam for college credit.			
1	Technology or Elective NCAA Approved	10-11-12	Intro to CP 1

<b>Exploring Robotics and Artificial Intelligence</b>			
The purpose of this course is for students to explore two emerging technologies through a hands-on approach that emphasizes creativity, problem-solving, critical thinking, and collaboration. Students will collaborate to create, build, and articulate their own robot as part of a larger class project. This course is also designed to introduce a foundation of understanding of artificial intelligence and its growing presence in the world around us.			
.5	Technology or Elective NCAA Approved	9-10-11-12	None

<b>Stop Motion through Digital Storytelling</b>			
Digital Storytelling through Stop Motion is a project-based class that develops an understanding for telling stories through the use of stop motion animation techniques. Students will learn about the history of stop motion, where it started and where it is today. The class will investigate the careers and roles associated with stop motion. This course is designed to introduce students to the techniques and skills used in animation and film production. The class will use Pixar and Laika as our prime examples of where stop motion can take you after high school.			
.5	Arts/Humanities or Technology or Elective	9-10-11-12	None

## **ENGLISH**

<b>Academic English 9</b>			
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

<b>Honors English 9</b>			
<p>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.</p>			
1	Core NCAA Approved	9	8 <sup>th</sup> Grade Recommendation

<b>Integrated Arts 9 - Social Studies &amp; English 9 (not available in 2024/2025)</b>			
<p>This is a fully integrated course that combines both English and Social Studies standards. This is a co-taught course where project-based instruction will be the primary mode of content delivery and assessment. Tests and quizzes are part of the assessment tools utilized but will not constitute the majority of the grade. Instruction will focus on developing critical reading and writing skills. The analysis of fiction and nonfiction texts will prepare students to communicate ideas through writing. Successful completion of this class includes producing complex projects and reflecting on student learning. This integrated class accounts for both the 1 English credit and 1 Social Studies credit. Scheduled into a double MOD that meets every day.</p>			
<b>2 total;</b> 1-Social Studies, 1-English	Core NCAA Approved	9	None

<b>Academic English 10</b>			
<p>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.</p>			
1	Core NCAA Approved	10	Academic/Honors English 9

<b>Honors English 10</b>			
<p>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.</p>			
1	Core NCAA Approved	10	Honors English 9 and/or Teacher Recommendation

**Integrated Arts 10 - Social Studies & English 10 (not available in 2024/2025)**

Integrated 10 allows sophomore students to explore the richness and diversity of world history and literature using an interdisciplinary approach by combining the study of World Affairs and English 10. Through an inquiry-based study of world narratives using historical and literary artifacts, students -and instructors - will explore the complexities of history and human behavior. Starting with crucial developments from the 18th century to the present, students will come to understand the special features of their contemporary world, and the ways in which conventional behaviors, assumptions, and institutions have been constructed. Additionally, this course is designed to help students develop the reading, writing, and thinking skills necessary to become informed global citizens who are able to take action. Scheduled into a double period, students will earn 1 credit for each discipline at the completion of the course.

<b>2 total;</b> 1-Social Studies, 1-English	Core and Elective NCAA Approved	10	English 9 & US History - Part 1 and/or Teacher Discussion - format comfort & self-awareness
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**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
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**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
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**AP English Language 11**

1	Core NCAA Approved	11	Honors English 10 and Teacher Recommendation
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### 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
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### 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. 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.

This course must be taken in sequence with Honors English 12: Human Flourishing.

.5	Core NCAA Approved	12	Honors English 11 or AP Language & Comp. and Teacher Recommendation
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### Honors English 12: Human Flourishing

This high school course, designed from a Language Arts perspective in inspiration and discussions with Carlow College's Atkins Center for Ethics, Duquesne University's Grefenstette Center for Ethics in Science, Technology, and Law, and professors at Pitt and CMU, aims to explore the concept of human flourishing throughout history and in contemporary society. Students will examine how humans have flourished, the significance of storytelling, historical perspectives, and ethical considerations. The course will promote values such as equity, inclusion, and belonging, encourage students to develop strong communication skills, engage in constructive conflicts, appreciate the importance of community, and envision a world of shared transcendent hope.

.5	Core NCAA Approved	12	For 2024-2025, AI and Ethics in the first semester
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### 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

<b>Journalism I</b>			
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, hotojournalism, and interview skills. "Students will frequently complete reporting and journalistic content for Avonews Online and also contribute to the main Avonews publication."			
.5	Arts/Humanities or Elective NCAA Approved	9-10-11-12	None

<b>Journalism II</b>			
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 <i>Avonews</i> and a variety of external publishing outlets. Students who completed Digital Storytelling and Journalism I should strongly consider Journalism II.			
.5	Arts/Humanities or Elective	9-10-11-12	Journalism I and/or Teacher Recommendation

<b>Creative Writing I</b>			
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 followed by examples, practice, and writing workshops. The culminating assessment of the course is the compilation of writings into a book of the student's design. The course is a semester elective open to all high school students.			
.5	Arts/Humanities or Elective NCAA Approved	9-10-11-12	None

<b>Creative Writing II</b>			
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. Each student will maintain a portfolio of projects and assessments.			
.5	Elective NCAA Approved	9-10-11-12	Creative Writing I and/or Teacher Recommendation

<b>Introduction to Theater (Drama/Production-based)</b>			
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.			
.5	Arts/Humanities or Elective	9-10-11-12	None

<b>Digital Storytelling through Stop Motion</b>			
Digital Storytelling through Stop Motion is a project-based class that develops an understanding for telling stories through the use of stop motion animation techniques. Students will learn about the history of stop motion, where it started and where it is today. The class will investigate the careers and roles associated with stop motion. This course is designed to introduce students to the techniques and skills used in animation and film production. The class will use Pixar and Laika as our prime examples of where stop motion can take you after high school.			
.5	Arts/Humanities or Technology or Elective	9-10-11-12	None

## **FAMILY AND CONSUMER SCIENCE**

<b>Today's Foods</b>			
This course is an in-depth study of foods. Each student will be able to challenge his/her culinary expertise while learning food preparation and techniques. There will be a concentrated effort on nutrition, food safety and sanitation, and the selection, purchasing, and storing of food.			
.5	Elective	9-10-11-12	None

<b>Gourmet Foods</b>			
This course focuses on the preparation and cooking of various gourmet foods. Units include gourmet appetizers, beverages, breads, salads, casseroles, desserts, and party planning.			
.5	Elective	9-10-11-12	None

<b>Foods Americana</b>			
This course will incorporate historical and cultural influences that have contributed to food specialties in our country. Foods from the seven regions of the United States as well as Native American foods will be prepared using a variety of cooking techniques and equipment. Students will be involved in outdoor cookery and holiday food experiences.			
.5	Elective	10-11-12	None

<b>World Foods</b>			
Students in this course will learn to prepare foods from various foreign countries, such as Germany, France, China, Italy, Mexico, and Canada. They will study customs and values of the specific countries. The students will be using a variety of cooking techniques and equipment in meal preparation.			
.5	Elective	10-11-12	None

<b>Interior Design</b>			
This course is designed for students who 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, living rooms, and kitchens.			
.5	Arts/Humanities or Elective	9-10-11-12	None

<b>Child Development</b>			
This course is designed for students who are interested in the physical growth and development of children. Prenatal health and development will be discussed, as well as the physical, cognitive, and social/emotional development of children through age 5. Students will plan and lead activities for preschool children in a preschool center or in a kindergarten classroom practicum experience. The lessons will include areas such as storytelling, music, art, snack, math, science, and games. These lessons will help to promote the healthy development of the preschool/kindergarten child. This course is ideal for any student interested in a career involving early childhood education, elementary education, tech. prep. for day care employment, and other careers involving children.			
.5	Elective	9-10-11-12	None

**MATHEMATICS**

<b>Algebra 1 - PART A</b>			
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

<b>Algebra I</b>			
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

<b>Honors Algebra I</b>			
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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
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### 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
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### 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
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### 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
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### 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
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### 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
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### 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
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### 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
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### 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
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### 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
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**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
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**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
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**Introduction to Data Science**

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.

1	Elective	12	Algebra I and Teacher Recommendation
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## MUSIC

<b>Concert Choir</b>			
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

<b>Concert Band</b>			
This class is a performance-oriented class. The student will be an active participant in a band setting that performs throughout the school year. The students will be evaluated each semester through playing tests and performances. Participation in band performances, both day and evening, is mandatory.			
1	Arts/Humanities or Elective	9-10-11-12	None

<b>Honors Symphonic Band</b>			
This select group of musicians will perform and study intermediate and advanced music literature. All students wishing to perform in this ensemble must audition. Students will be assessed using the PMEA solo/ensemble audition rubric. A student must score at least a 63, which is a superior rating, to join the group. Students will be auditioning on a challenging excerpt from standard band literature. Students in this group will perform 3-4 times a year and participate in PMEA auditions. All students in this ensemble will be required to participate in PMEA Music Performance Assessment. Participation in band performances, both day and evening, is mandatory.			
1	Arts/Humanities or Elective	9-10-11-12	Audition

<b>American Popular Music 1 : A Reflection of Society 1850-1969</b>			
American Popular Music 1: 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 the value of popular music (blues, ragtime, jazz and rock 'n' roll, R n'B) to society.			
.5	Arts/Humanities or Elective	9-10-11-12	None

<b>American Popular Music 2: A Reflection of Society 1970-Present</b>			
American Popular Music 2: 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 the value of popular music ( Classic Rock, Funk, Disco, Pop, Hip Hop, Modern R'n'B) to society.			
.5	Arts/ Humanities or Elective	9-10-11-12	American Popular Music 1

<b>Honors Music Theory &amp; Composition</b>			
This course offers the student the opportunity to learn and apply basic Music Theory & Composition. It will focus on harmony and arranging at multiple levels and is a hands-on experience. The course will have the student write their own compositions for a variety of different musical ensembles.			
.5	Arts/Humanities or Elective	9-10-11-12	Teacher Recommendation

## **PHYSICAL EDUCATION AND HEALTH EDUCATION**

<b>PE 9: Wellness &amp; Group Fitness</b>			
Course is designed to promote lifetime fitness and physical activity and health and wellness for all 9 <sup>th</sup> 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.			
.5	Graduation Requirement	9	None

<b>Health/Physical Education 10-12</b>			
Focus is largely on the growth and development of students through the medium of total body activities. The principle 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.			
.5	Graduation Requirement	10-11-12	None

## **SCIENCE**

<b>Biology</b>			
Biology is an introductory course that emphasizes the nature, form, chemical structure, and heredity of living things. Students are exposed to units of study that include basic biological principles, biochemistry, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, ecology and evolution.. Laboratory investigations will be done to enhance other classroom learning activities. This course is designed to help prepare students for the Pennsylvania Keystone Exam and provide an overall understanding of the study of life.			
1	Core, NCAA Approved	9	None

<b>Honors Biology</b>			
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Honors biology focuses on living things and how they interact with each other and with their environment. Students will focus on the interdependence as well as the complexity of organisms. Students will cover many aspects of life science including biochemistry, bioenergetics, homeostasis, genetics, evolution, and ecology. Laboratory activities and science experiments throughout the year will refine student science process skills and promote inquiry. This course is designed to help prepare students for the Pennsylvania Keystone Exam and provide an extensive understanding of the study of life.

1	Core, NCAA Approved	9	Teacher Recommendation
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### **Advanced Placement Biology**

This class is designed to expose the students to a college level introductory biology course that would typically be taken by Freshman Biology majors. At the conclusion of the course, students should master molecules and cells, heredity and evolution, organisms and populations, and laboratory analysis. 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 science class. Students may earn college credit by taking and passing the Advanced Placement examination in Biology with a minimum score of 3 out of 5 at the conclusion of this course.

(Weighted Grade Course)

1	Core or Elective NCAA Approved	11-12	Biology & Chemistry and Teacher Recommendation
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### **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
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### **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
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### **Chemistry**

<p>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.</p>			
1	Core or Elective NCAA Approved	10, 11, 12	Algebra I & Biology

<b>Honors Chemistry</b>			
<p>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)</p>			
1	Core or Elective NCAA Approved	10, 11, 12	80% or above in Biology and Algebra I; Teacher Recommendation

<b>Physics</b>			
<p>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.</p>			
1	Core or Elective NCAA Approved	11, 12	Algebra I & Biology or Teacher Recommendation if have not taken Humanities/STEM Chemistry

<b>Honors Physics</b>			
<p>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)</p>			
1	Core or Elective NCAA Approved	11*, 12 *requires teacher discussion	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.
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### 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.

.5	Core or Elective NCAA Approved	9-10-11-12	None
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### 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. This course concludes with alternatives we might use to build a society capable of living on Earth with less harmful impacts.

.5	Core or Elective NCAA Approved	9, 10, 11, 12	None
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### Geo-Science

The Geo-Science/Earth 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.

.5	Core or Elective	9-10-11-12	None
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<b>Introduction to Human Body Science</b>			
This is mash-up introduction course of health, basic anatomy, daily life, and response to human body emergencies. The course will include a deeper look at first responder and health careers. This is a look at how to navigate important health and wellness decisions throughout your life including human growth and development, cardiovascular & respiratory health, and healthy lifelong habits. Collaboration of teacher(s), nurse, athletic director, counselor(s), and a series of first responders.			
.5	Core or Elective	9, 10, 11, 12	None

<b>What is the Mind? Introduction to Neuro-Science</b>			
This serves as an examination of the mind and brain from many perspectives - physical anatomy, functioning, messaging, and endless activity. This course complements our psychology course but is not in direct sequence. If brain waves and the thinking that creates, alters, and disrupts them interests you, this may be a course to consider. In course development stage currently, but will involve possible site-visits with past-secondary neuroscience labs and additional opportunities.			
.5	Core or Elective	11, 12	None

<b>Forensic Science</b>			
This course introduces the multiple disciplines that comprise forensic science. It is designed in topic modules that revolve around specific case studies. Student interactions to create team collaborations are utilized. The class-time is devoted to discussions, activities, and engagement in lab and practical hands-on tasks. Material is presented virtually through recorded lessons and corresponding notes with time frames to complete the required components as well as through in-person discussion sessions. The combination of hands-on and online portions provide each student with a well-rounded understanding of the intertwining topics in this complex science discipline.			
.5	Core or Elective NCAA Approved	10-11-12	Biology & Chemistry concurrent

<b>Advanced Placement Chemistry</b>			
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	Humanities/STEM Chemistry, Algebra II, and Teacher Recommendation

<b>Scientific Research and Application (semester or full-year)</b>			
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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.*

0.25 or 0.5	Elective NCAA Approved	10*-11-12  *requires self-discipline; teacher discussion	Teacher Recommendation
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## **SOCIAL STUDIES**

### **Integrated Arts 9 - Social Studies & English 9 (not available in 2024/2025)**

This is a fully integrated course that combines both English and Social Studies standards. This is a co-taught course where project-based instruction will be the primary mode of content delivery and assessment. Tests and quizzes are part of the assessment tools utilized but will not constitute the majority of the grade. Instruction will focus on developing critical reading and writing skills. The analysis of fiction and nonfiction texts will prepare students to communicate ideas through writing. Successful completion of this class includes producing complex projects and reflecting on student learning. This integrated class accounts for both the 1 English credit and 1 Social Studies credit. Scheduled into a double MOD that meets every day.

<b>2 total;</b> 1-Social Studies, 1-English,)	Core NCAA Approved	9	None
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### **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
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### **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 Revolutionary War through the Civil War 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

<b>World Affairs 10</b>			
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

<b>Honors World Affairs 10</b>			
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

<b>Integrated Arts 10 - Social Studies &amp; English 10 (not available in 2024/2025)</b>			
Integrated 10 allows sophomore students to explore the richness and diversity of world history and literature using an interdisciplinary approach by combining the study of World Affairs and English 10. Through an inquiry-based study of world narratives using historical and literary artifacts, students -and instructors - will explore the complexities of history and human behavior. Starting with crucial developments from the 18th century to the present, students will come to understand the special features of their contemporary world, and the ways in which conventional behaviors, assumptions, and institutions have been constructed. Additionally, this course is designed to help students develop the reading, writing, and thinking skills necessary to become informed global citizens who are able to take action. Scheduled into a double period, students will earn 1 credit for each discipline at the completion of the course.			
<b>2 total;</b> 1-Social Studies, 1-English	Core and Elective NCAA Approved	10	English 9 & US History Pt. I and/or Teacher Discussion - format comfort & self-awareness

<b>United States History - Part 2</b>			
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

<b>Honors United States History - Part 2</b>			
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

<b>Advanced Placement United States History</b>			
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 <b>1491 to the present</b> . Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections. <b>Students desiring to take this course must have excellent reading ability, writing skills, and academic achievement.</b> 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

<b>Problems of Democracy (POD) 12</b>			
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

<b>CHS American Politics/A.P. Government (College in High School, University of Pittsburgh)</b>			
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
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### 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	11, 12	Honors World Affairs and Teacher Recommendation
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### 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.

.5	Elective	NCAA Approved	10-11-12	None
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### 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 along the dimensions of race, class, and gender. No prior knowledge of sociology is expected.

.5	Elective, NCAA Approved	10-11-12	None
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### 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.

.5	Elective NCAA Approved	9-10-11-12	Requires maturity; teacher recommendation
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### American Conflicts

<p>The semester-long course will explore American military engagements of the late 20<sup>th</sup> and early 21<sup>st</sup> 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.</p>			
.5	Elective, NCAA Approved	9-10-11-12	None

<b>Conspiracy Theories</b>			
<p>From the Salem Witch Trials to the present day obsessions with the JFK assassination, UFOs, and alleged misdeeds of the Clinton and Bush administrations, Americans have embraced conspiracy theories to explain mysterious events and wrenching social changes, sometimes with far-reaching results. The primary objective of the course is to help students deal more intelligently with the conspiratorial fears and political paranoia that pervade modern American culture, by placing them in a broad historical context and learning to subject them to rigorous local and cultural analysis. We will also consider some real conspiracies: (such as the details of the Lincoln assassination) that are considerably less well known than the imaginary ones.</p>			
.5	Elective, NCAA Approved	9-10-11-12	None

<b>Genocide Studies: The Holocaust</b>			
<p>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.</p>			
.5	Elective NCAA Approved	10-12	None; maturity for nature of subject focus

**TECHNOLOGY EDUCATION/ENGINEERING**

<b>CHS Introduction to Engineering Design (College in High School, RIT)</b>			
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	Technology or Elective NCAA Approved	10-11-12	Algebra I

<b>CHS Computer Integrated Manufacturing (College in High School, RIT)</b>			
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	Technology or Elective NCAA Approved	10-11-12	Algebra I

<b>Manufacturing Technology (Making)</b>			
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.			
.5	Technology or Elective	9-10-11-12	None

## **WORLD LANGUAGES**

<b>French I</b>			
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

<b>French II</b>			
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

<b>French III</b>			
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

<b>CHS French (College in High School, University of Pittsburgh)</b>			
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

<b>Latin I</b>			
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

<b>Latin II</b>			
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

<b>Latin III</b>			
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1	Elective, NCAA Approved	10-11-12	Latin II

<b>CHS Latin (College in High School, University of Pittsburgh)</b>			
This course is an introduction to Latin poetry. Students will read selections from Books I, II, and IV of Virgil's epic, <b>The Aeneid</b> , 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

<b>Mandarin Chinese I</b>			
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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

<b>Mandarin Chinese II</b>			
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

<b>Mandarin Chinese III</b>			
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

<b>CHS Chinese (College in High School, University of Pittsburgh)</b>			
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

<b>Spanish I</b>			
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

<b>Spanish II</b>			
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

<b>Spanish III</b>			
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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

<b>CHS Spanish (College in High School, University of Pittsburgh)</b>			
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**

<b>Freshman Seminar</b>			
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.			
.5	Graduation Requirement	9	None

<b>Research Seminar</b>			
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/project 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.			
.5 or 1	Elective	11-12	None

<b>Experience Based Learning Opportunity</b>			
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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

.5 or 1	Elective	11-12	Approval Process
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### 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.

- 120 hours of work time equates to .5 semester credit; students may gain up to 2 credits during 11th and 12th grades.
- Hours must be logged and then approved by a school administrator and/or counselor
- Students keep a log of work hours and be able to provide a pay stub for verification

.5 or 1	Elective	11-12	Approval Process Counselor Conversation
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### 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
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## 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 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.

## 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 enroll in an advanced career pathway program with 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 1 st 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 10 th 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.

**SEE WHICH COLLEGES OFFER FREE CREDITS FOR YOUR CTE PROGRAM OF STUDY (POS)**

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 [ww.beattietech.com](http://ww.beattietech.com) for additional information.

Students who attend A. W. Beattie may be eligible to earn mathematics and/or science 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 9 th, 10 th or 11 th 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	Health and Nursing Sciences
Automotive Collision Technology	Heating, Ventilating, & Air Conditioning Tech.
Automotive Technology	Network Engineering/Cyber Security
Carpentry/Building Construction	Pastry Arts
Cosmetology	Pharmacy Operations (11th 12th Grade Only)
Culinary Arts	Robotics Engineering Technology
Dental Careers	Sports Med/Rehab Therapy & Exer. Sci.Tech
Early Childhood Education	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.

Contact – 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.

