

# NORTH ALLEGHENY



**GRADES 9-12**  
**2025-26**





# **NORTH ALLEGHENY SCHOOL DISTRICT**

## **2025–2026 Program of Studies**

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Special thanks to the School Counselors, Department Chairpersons, Coordinator of Curriculum & Instruction, and Executive Council Members who made this Program of Studies possible.

**Publication / Production:**  
Office of Secondary Education

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### **EEO and Title IX Statement**

North Allegheny School District (North Allegheny) does not discriminate in its educational programs, activities or employment practices based on race, color, national origin, sex, sexual orientation, disability, age, religion, ancestry, genetic information, or any other legally protected category. Announcement of this policy is in accordance with State Law including the Pennsylvania Human Relations Act and with Federal law, including Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1967, and the Americans with Disabilities Act of 1990.

For more information, please contact:  
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## **Introduction and Welcome Message**

On behalf of the administration and staff of North Allegheny Intermediate High School and North Allegheny Senior High School, we are excited to share the 2025-2026 Program of Studies! Our district is dedicated to preparing every student for success in a changing world by offering dynamic, rigorous, and individualized educational experiences tailored to student interests and future goals.

The NASD Program of Studies provides a comprehensive listing of high school courses and an overview of policies and procedures related to graduation requirements. This document assists students entering grades 9 through 12 in planning their high school education. It is designed to guide you through important information on curricular offerings, course selection, and the scheduling process.

North Allegheny High School's academic program offers significant opportunities for students to engage in rigorous and meaningful coursework. We encourage families to review course requirements for graduation, discuss the course selection process, and complete the NA Plan Ahead Form on page 9. This form is a valuable tool to help students design an academic program aligned with their college, technical school, military, and career goals.

Graduation requirements are clearly defined on page 6. We ask every family to review the Keystone Exam expectations, as these exams are a component of Pennsylvania's high school graduation requirements, and federal regulations mandate participation in state assessments.

Families should carefully review course descriptions and requirements, including the scheduling timeline on page 6. Our high school staff collaborates with each student and family throughout the scheduling process. When making scheduling decisions, it is crucial to consider the requirements for college admission and career placement. Teachers and school counselors work together to make course approvals before scheduling. Students also select elective courses based on their interests and goals, and are encouraged to discuss any concerns with teachers, counselors, and families.

North Allegheny High School fosters student growth and resiliency by providing support for all students. Academic and personal resilience is built on various social, environmental, and cultural factors that shape the student experience. While we cannot control all challenges students face, we can offer opportunities to develop skills needed to thrive.

Our high school team is committed to supporting your educational journey and ensuring your success in a changing world. We look forward to collaborating with each student and family through the scheduling process. Welcome to the 2025-2026 school year, and we wish you all the best in your educational endeavors.

*The building level administration reserves the right to make adjustments to the Program of Studies, including course offerings, graduation requirements, and scheduling, based on enrollment trends, staffing availability, state or federal mandates, evolving student needs, or other unforeseen circumstances upon approval of District level administration.*



## *2025 – 2026 Program of Studies, Grades 9 – 12*

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## NORTH ALLEGHENY SCHOOL DISTRICT

### Our Path to Excellence: North Allegheny School District 2024–2029 Strategic/Comprehensive Plan

The North Allegheny School District's 2024–2029 Strategic/Comprehensive Plan serves as a roadmap for our educational and operational priorities over the next five years. This plan reflects our commitment to continuous improvement and transparency as we strive to be one of the top school districts in the country.

Recognizing the need to align our strategic goals with the evolving needs of our community, we took the opportunity to refine our plan, initially approved in 2022, with input from students, parents/guardians, staff, and the School Board. Guided by five key principles, our plan focuses on setting ambitious goals, measuring success, ensuring transparency, promoting continuous improvement, and maintaining accountability.

#### Key Principles

1. ***Excellence in Education:*** We are committed to setting goals that ensure North Allegheny aspires to be among the best districts in the nation.
2. ***Performance Measurement:*** We will measure our success and identify areas for growth using clear key performance indicators.
3. ***Community Transparency:*** We will be open with our community about our performance, sharing results and progress annually.
4. ***Continuous Improvement:*** Our approach is data-driven, using action plans and regular assessments to foster growth.
5. ***Accountability:*** We will provide user-friendly documentation for both internal and external stakeholders to maintain accountability.





## NORTH ALLEGHENY SCHOOL DISTRICT

### 2025-2026 Scheduling Timeline

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

<b><u>Date</u></b>	<b><u>Description</u></b>
January 2	The Program of Studies is available to students and families on the NASD Website.
January 15	Middle School Counselors and NAI School Counselors present scheduling overview and information to grade 8 students. Grade 8 students will receive a paper copy of the newly adopted Program of Studies.
January 21 - January 28	Teachers have individual meetings with students to discuss course approvals. The teachers will input the individual approved courses into PowerSchool.
February 3 - February 5	Middle School and High School Counselors meet with groups of students to review the scheduling process and timelines.
February 4	Elective Fair and Scheduling Process Information Sessions for students and families at North Allegheny Intermediate High School from 6:00 - 7:30 p.m.
February 10 - February 28	School Counselors meet with grades 8 - 11 students individually to confirm course selections.
February 28	Final course selections and waivers are due to the respective School Counseling Office for all grades 8 – 11 students.
March 4	Students and families receive a verification notice of courses selected during the scheduling window for final review.
March 7	In preparation for staffing, final course selections are due to the School Counseling Office.
August 2025 (date TBD)	Schedules are available in the Student Information System for students and families.
August 21, 2025	First Day of School for Students.

## 2025-2026 Graduation Requirements and Summary

North Allegheny School District requires a minimum of 24 total credits for graduation.

Course	Credits Required
English / Language Arts	4.0
Social Studies	4.0
Mathematics	3.0
Science (includes Biology)	3.0
Health and Physical Education (0.5 per year)	2.0
Wellness for Life	0.5
S.T.E.M.	1.0
Electives	6.5
<b>Total</b>	<b>24</b>

### **Additional Scheduling Requirements**

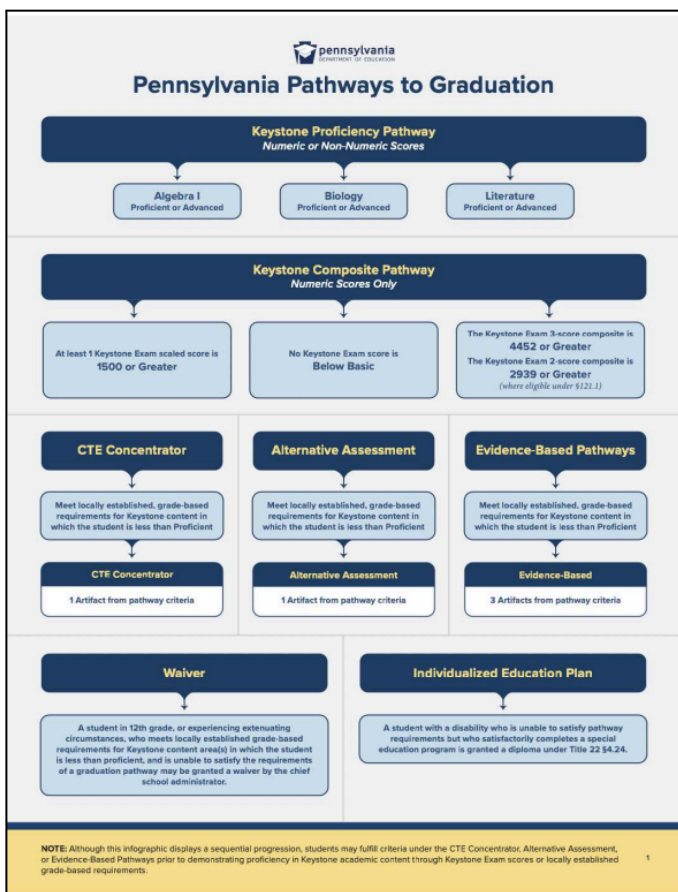
1. Students must schedule a minimum of 7.0 credits each year. Students who deviate from this requirement must have the approval of the Building Principal.
2. There are eight (8) instructional periods in the high school schedule. Students are encouraged to take advantage of the many and varied elective courses offered by the District.
3. Students may not schedule more than the equivalent of one full year/full time study hall during the year.
4. Students are encouraged to investigate college admissions requirements. Many colleges recommend 4 years of English, Social Studies, Mathematics, and Science. Many colleges recommend 2-3 consecutive years of study of a World Language in high school.
5. Students must meet the Keystone Exam requirements.



## Keystone Exam Requirements and Information

Keystone Exams are end-of-course assessments designed to assess proficiency in three subjects: Algebra I, Literature, and Biology. Keystone Exams are one component of Pennsylvania's system of high school graduation requirements and help school districts guide students toward meeting state standards. Federal regulations require schools to participate in state assessments. Keystone Exams are typically taken during the spring of the year in which a student is enrolled in the given course. Students must demonstrate proficiency on each of the three Keystone Exams. If a student does not receive a score of "Advanced" or "Proficient", the student will be scheduled to retest during the next designated testing window. If a Proficient or Advanced score is still not obtained during a student's second attempt, additional pathways will be explored at that time. It is our goal that all North Allegheny students demonstrate a Proficient or higher score on each Keystone Exam.

Through Act 158 of 2018 and Act 6 of 2017, students graduating from a Pennsylvania public high school will have greater flexibility in reaching proficiency through five pathway options. These pathways provide greater flexibility to students; however, they are not considered until a student has made two attempts to reach Proficiency on each of the Keystone exams. These five pathways are defined in detail using the link in the section title (above), and outlined below. [These forms can be referenced near the end of this document.](#)



**Pennsylvania**  
DEPARTMENT OF EDUCATION

### Pathway Criteria

CTE Concentrator	Alternative Assessment	Evidence-Based
<b>1 Artifact</b>	<b>1 Artifact</b>	<b>3 Artifacts</b> consistent w/student goals ONE or more from Section One No more than TWO from Section Two
Industry-based competency certification	Attainment of one alternative assessment score or better: ACT (2%), ASVAB AFQT (3%), PSAT/NMSQT (970), or SAT (1010)	<b>Section 1</b>
Likelihood of industry-based competency assessment success	Attainment of Gold Level or better on ACT WorkKeys	Attainment of 630 or better on any SAT Subject Test
Readiness for continued engagement in CTE Concentrator program of study	Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient	Attainment of Silver Level or better on ACT WorkKeys
	Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient	Attainment of 3 or better on any AP Exam
	Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient	Attainment of 3 or better on any IB Exam
	Successful completion of a pre-apprenticeship program	Successful completion of any concurrent enrollment or postsecondary course
	Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4-yr program for college-level coursework	Industry-recognized credentialization
		Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program
		<b>Section 2</b>
		Attainment of Proficient or Advanced on any Keystone Exam
		Successful completion of a service-learning project
		Letter guaranteeing full-time employment or military enlistment
		Completion of an internship, externship, or cooperative education program
		Compliance with NCAA Division II academic requirements

## High School Course Sequence for Classes of 2026, 2027, 2028 and 2029

North Allegheny Intermediate High School Course Sequence		North Allegheny Senior High School Course Sequence	
<u>Grade 9 - Class of 2029</u>	<u>Grade 10 - Class of 2028</u>	<u>Grade 11 - Class of 2027</u>	<u>Grade 12 - Class of 2026</u>
<b>Required courses - 5 credits</b>  English - 1.0 credit Social Studies - 1.0 credit Mathematics - 1.0 credit Science - 1.0 credit Health & Phys Ed - 0.5 credit <i>*Wellness for Life - 0.5 credit</i>  <b>Elective Courses - 2.0-3.0 credits</b>	<b>Required courses - 4.5 credits</b>  English - 1.0 credit Social Studies - 1.0 credit Mathematics - 1.0 credit Science - 1.0 credit Health & Phys Ed - 0.5 credit <i>*Wellness for Life - 0.5 credit</i>  <b>Elective Courses - 2.5-3.5 credits</b>	<b>Required courses - 4.5 credits</b>  English - 1.0 credit Social Studies - 1.0 credit Mathematics - 1.0 credit Science - 1.0 credit Health & Phys Ed - 0.5 credit   <b>Elective Courses - 2.5-3.5 credits</b>	<b>Required courses - 2.5 credits</b>  English - 1.0 credit Social Studies* - 1.0 credit Health & Phys Ed - 0.5 credit  <b>Elective Courses - 2.5-5.5 credits</b>  <i>* Students who attend A.W. Beattie Career Center during their senior year are not required to take Grade 12 Social Studies electives. If students withdraw from Beattie during their senior year, they will be required to earn 4 credits of Social Studies</i>

*At least one additional credit must be taken in a S.T.E.M. related area (i.e., Science, Technology, Engineering, and Mathematics) that is not already counting toward another core requirement. The Program of Studies outlines specific courses that meet the S.T.E.M. designation.*

*\*Wellness for Life: Students have the option to take this course during ninth or tenth grade.*

## North Allegheny Plan Ahead Form

While the District strongly encourages students to explore a broad range of course offerings during their high school experience, it is also important to communicate the potential for more specific career exploration and preparation. All students at North Allegheny will utilize the Naviance student program to identify career interests. The Pennsylvania Academic Standards for Career Education and Work and Naviance Career Clusters include details and information for students to plan for post-secondary decisions. If students have a strong interest in a specific Career Cluster, they should refer to the details included in Naviance and/or contact their School Counselor for further discussion about important required and elective course selections.

### NASD Plan Ahead Form

Subject Field (required credits)	9th Grade	Credit	10th Grade	Credit	11th Grade	Credit	12th Grade	Credit	Total Credits Earned	Total Credits Needed for Graduation
English (4 credits)										4
Social Studies (4 credits)										4
Mathematics (3 credits)										3
Science (3 credits)										3
Physical Education (0.5 credit per year)										2
Wellness (0.5 credit)										0.5
STEM (1 credit)										1
Elective (college-bound consider at least 2 years of World Language)										
Elective										
Elective										
Elective										
Elective										
Elective										
Total Credits (24 credits)										minimum of 24

<b>Keystone Exam Verification (Proficient = 1500)</b>	<b>Algebra</b>		<b>Biology</b>		<b>Literature</b>		<b>Pathway Completion</b>	
	Exam Date		Exam Date		Exam Date			
	Score		Score		Score			

## Grading System

Grades reflect the student's average of achievement in a particular course and are on a four-point quality point scale unless enrolled in a weighted course. Details of weighted course categories and the corresponding quality points are included below.

Percent	Grade	Weighted Quality Points by Course Category		
		Non-weighted Courses	Honors Courses, CHS <small>(College in HS)</small> Courses	AP <small>(Advanced Placement)</small> Courses
90 - 100	A	4.0	4.5	5.0
80 - 89	B	3.0	3.5	4.0
70 - 79	C	2.0	2.5	3.0
60 - 69	D	1.0	1.5	2.0
59 or below	E (failure)	0.0	0.0	0.0

**Please note:** Students who wish to request a grade change must do so within a two-week window following the end of the grading period.

## High School Transcript

The transcript officially records the student's academic work done while enrolled in high school; however, **any high school courses taken during the school year at NASD prior to a student entering 9th grade will appear on the high school transcript, but are not calculated in the student's QPA, nor do they count toward graduation requirements.** The official North Allegheny transcript includes demographic information and lists all courses attempted and the final grade earned for each course. The earned cumulative quality point average (QPA) is also included. The North Allegheny transcript is generated after a student has completed one full semester of study at North Allegheny Intermediate or Senior High Schools. Courses taken at a learning institution outside of NASD will not appear on the North Allegheny transcript.

Class rank is not listed on student transcripts and is not disclosed by the District to any outside agency. The District only generates class rank internally in order to provide school counselors with the information necessary to confirm scholarship applications, military academy applications, etc., that may require class rank.

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

## Advanced Placement

### Program and Courses Available

The Advanced Placement Program provides students the opportunity to pursue college-level coursework while in high school. Students may receive advanced placement credit upon entering college for their score on a national AP exam administered in May. AP exams are scored on a 1-5 scale and many colleges and universities award recognition for scores of 3, 4, or 5. Students should check the details on how AP test scores are managed for each college/university using <https://apstudent.collegeboard.org/creditandplacement>. It is the responsibility of the student to send AP scores to their chosen school directly from the College Board. The AP exams are optional and students who choose to take an AP exam must register to do so and assume the related costs. AP courses are weighted (refer to page 10). Current AP courses taught at North Allegheny are listed below. Exams will be offered only for the courses listed. Refer to individual course descriptions for additional information.

AP Course	AP Exam	AP Course	AP Exam	AP Course	AP Exam
<b>Art and Design</b>	2-D Art and Design 3-D Art and Design Drawing	<b>English 4</b>	English Literature and Composition	<b>Physics 1 and 2</b>	Physics 1 and 2: Algebra Based
<b>Art History</b>	Art History	<b>Environmental Science</b>	Environmental Science	<b>Physics C</b>	Physics C: Electricity & Magnetism Physics C:Mechanics
<b>Biology</b>	Biology	<b>European History</b>	European History	<b>Pre-Calculus</b>	Pre-Calculus
<b>Calculus AB</b>	Calculus AB	<b>French</b>	French Language and Culture	<b>Psychology</b>	Psychology
<b>Calculus BC</b>	Calculus BC	<b>German</b>	German Language and Culture	<b>Spanish</b>	Spanish Language and Culture
<b>Chemistry</b>	Chemistry	<b>Human Geography</b>	Human Geography	<b>Statistics</b>	Statistics
<b>Computer Science Principles</b>	Computer Science Principles	<b>Latin</b>	Latin	<b>United States Government &amp; Comparative Politics</b>	Comparative Government & Politics  United States Government & Politics
<b>Computer Science</b>	Computer Science A	<b>Music</b>	Music Theory	<b>United States History</b>	United States History
<b>Economics</b>	Macroeconomics Microeconomics	<b>Physics 1</b>	Physics 1: Algebra Based		
<b>English 3</b>	English Language and Composition	<b>Physics 2</b>	Physics 2: Algebra Based		

## College in High School (CHS)

College in High School offers regional high school students the opportunity to earn both high school and college credit in courses taught in their high school classrooms. This program provides students the chance to participate in college-level learning experiences before they leave high school, while helping students to establish a collegiate transcript for potential transfer credits in the future. Students are not required to take the course for collegiate credit.

The following courses are offered for CHS credit at North Allegheny School District. Please note that each college or university requires their own registration and independent payment procedures. Please talk with the teacher of the course at North Allegheny School District for more information. All courses listed below equate to three (3) collegiate credits unless otherwise noted. North Allegheny partners with the following institutions of higher learning: [Duquesne University](#), [LaRoche University](#), [Rochester Institute of Technology](#), and the [University of Pittsburgh](#).

If you have questions about whether a college or university will accept these credits toward the completion of a bachelor's degree, please contact the specific Admissions Office directly. This database also serves as a resource for students and families: [http://eceapps.uconn.edu/credit\\_transfer\\_database/](http://eceapps.uconn.edu/credit_transfer_database/)

### Business, Computers and Information Technology

Course	Course #	University
Business Communications	NA0206	La Roche University
Honors Advanced Accounting 1 and 2	NA0211 NA0212	LaRoche University
Intro to Information Science	NA0225	University of Pittsburgh
Principles of Accounting 1 and 2	NA0213 NA0214	LaRoche University
Web Page Design	NA0223	La Roche University

### Mathematics

Course	Course #	University
AP Calculus BC	NA0736	La Roche University
AP Computer Science (4 Credits)	NA0743	La Roche University
Honors Calculus	NA0734	La Roche University
Honors PreCalc w/ Trigonometry	NA0714	La Roche University
Honors Probability and Statistics	NA0752	La Roche University
Honors Linear Algebra	NA0753	La Roche University

### English

Course	Course #	University
AP English 4: Lit & Comp	NA0435	La Roche University
Film Studies	NA0476	La Roche University
Honors Argument	NA0469	University of Pittsburgh
Honors Journalism 11	NA0471	La Roche University
Speech	NA0477	La Roche University

### Music

Course	Course #	University
AP Music	NA0857	La Roche University

### Science

Course	Course #	University
AP Biology (4 Credits)	NA0905	La Roche University
AP Chemistry (4 Credits)	NA0915	La Roche University
AP Physics 1 & 2 (4 Credits)	NA0927	La Roche University

### Family and Consumer Science

Course	Course #	University
Child Psychology	NA0570	La Roche University

**Social Studies**

Course	Course #	University
AP European History	NA1052	La Roche University
AP Psychology	NA1053	La Roche University
AP United States History	NA1025	La Roche University
Honors American Foreign Policy: 1945-Present	NA1041	La Roche University
Honors Modern American History and Politics	NA1024	La Roche University
Honors History of East Asia: 1945-Present	NA1043	La Roche University
Honors History of Europe & Russia: 1945-Present	NA1042	La Roche University
Multicultural Experience	NA1034	La Roche University
Sociology	NA1035	La Roche University
Honors Intro to Philosophy	NA1044	La Roche University

**Technology and Engineering Education**

Course	Course #	University
Honors Intro to Engineering Design PLTW	NA1271	Rochester Institute of Technology (RIT)
Honors Digital Electronics PLTW	NA1273	Rochester Institute of Technology (RIT)
Honors Principles of Engineering PLTW	NA1272	Rochester Institute of Technology (RIT)
Honors Civil Engineering and Architecture PLTW	NA1274	Rochester Institute of Technology (RIT)

\* Note: Project Lead the Way (PLTW) courses are not only eligible for college credit through Rochester Institute of Technology (RIT), but also many other colleges and universities that can be found on the PLTW student opportunities page at: <https://www.pltw.org/experience-pltw/student-opportunities>

**Visual Arts**

Course	Course #	University
AP Art History	NA1381	La Roche University
AP Art and Design	NA1399	La Roche University
Honors Art	NA1391	La Roche University
Photography 2	NA1372	La Roche University

**World Languages**

Course	Course #	University
AP French	NA1409	La Roche University
AP German	NA1419	La Roche University
AP Latin	NA1429	Duquesne University
AP Spanish	NA1439	La Roche University
Honors French 4	NA1407	La Roche University
Honors German 4	NA1417	La Roche University
Honors Latin 4	NA1427	Duquesne University
Honors Spanish 4	NA1437	La Roche University
Honors French 5	NA1408	La Roche University
Honors German 5	NA1418	La Roche University
Honors Latin 5	NA1428	Duquesne University
Honors Spanish 5	NA1438	La Roche University

## **Post Secondary Testing Information**

### **ACT**

The American College Testing (ACT) is an entrance exam used by colleges/universities for the purpose of admission decisions. It is administered in September, October, December, February, April, and June of each year. High school students typically take the ACT during their junior year and can take it as late as the fall of senior year. Students who choose to take the ACT Assessment must register to do so and assume the related costs. Registration materials are available at [www.act.org](http://www.act.org).

### **PreACT**

The PreACT is a test consisting of multiple-choice sections in English, Math, Reading, and Science. The PreACT provides valuable practice, including questions and scores similar to those on the ACT test. It also provides career suggestions based upon answers to the PreACT Interest Inventory. After testing, students will receive an estimated ACT score based on their performance, as well as data that they can use to help them understand their performance and prepare for the official exam. This exam is offered annually to 10th grade students at North Allegheny Intermediate. Information for this exam can be accessed through the school counseling office.

### **PSAT and the National Merit Scholarship Qualifying Test (NMSQT)**

The Preliminary Scholastic Aptitude Test (PSAT) is an assessment that is aligned to the SAT. It measures reading, writing and language, and mathematical abilities important for academic success in college. The test is useful as a practice test for the SAT. The PSAT is offered in October for juniors and serves as the National Merit Scholarship Qualifying Test in a nationwide competition for recognition, awards, and scholarships.

Tenth grade students may elect to take the PSAT for practice; however, their scores are not applicable to the NMSQT. Grade 10 students interested in taking the exam will assume all related costs. Registration information and details for grade 10 students will be available in the NAI School Counseling Office.

### **SAT**

The SAT is an entrance exam used by most colleges and universities. It is typically taken by juniors in the spring and seniors in the fall. It is administered at North Allegheny Senior High School in October, November, December, March, May, and June. Students who choose to take the exam must register to do so and assume the related costs. Registration materials are available at [www.collegeboard.com](http://www.collegeboard.com).

### **ASVAB**

The Armed Services Vocational Aptitude Battery (ASVAB) is a multiple-aptitude battery that measures developed abilities and helps predict future academic and occupational success in the military. It is administered annually to more than one million military applicants, high school, and post-secondary students. Visit the official ASVAB website to learn more: [www.officialasvab.com](http://www.officialasvab.com)

### **TOEFL**

The Test of English as a Foreign Language (TOEFL) is a standardized test to measure the English language ability of non-native speakers wishing to enroll in English-speaking universities. The test is accepted by more than 11,000 universities and other institutions in over 190 countries and territories.



## Acceleration

### **\*Mathematics**

Students may have the opportunity for acceleration through summer coursework in a face-to-face setting. Courses must be pre-approved by the Math Department Chairperson. Students pursuing math acceleration must earn a minimum grade of a 'B' (80% or better) in the course AND a minimum grade of a 'B' (80% or better) on the North Allegheny comprehensive exam for the course. The exam will be administered by North Allegheny faculty on a single, required testing date following the completion of all summer courses, prior to the start of the new school year. Students that do not meet the minimum grade requirement of 80% in the coursework will not be permitted to sit for the comprehensive exam. Accelerating through a full year/full time course via a compacted summer program is **extremely challenging**. Students and families must recognize acceleration should only be considered in rare circumstances. It is possible for a student to attempt acceleration and then fail to meet the course minimum grade or cumulative test threshold. If the student does not meet both criteria, the student will be placed in the same course attempted through acceleration. Waivers are not accepted in these circumstances. Any student who successfully accelerates through Algebra 1 will be required to take the Keystone Algebra 1 Exam during the next available Keystone Exam testing window.

### **\*Science**

Students may have the opportunity to accelerate in Honors Biology (summer prior to 9th grade) or Honors Chemistry (summer prior to 10th grade). Discussion of these opportunities begin during course approvals with the current science teacher. Summer courses must be pre-approved by the Science Department Chairperson. Please see the science department website or ask your current science teacher for paperwork that will include the currently approved courses, as they may change each year. Students pursuing science acceleration must earn a minimum grade of a 'B' (80% or better) in the course AND a minimum grade of a 'B' (80% or better) on the North Allegheny acceleration exam for the course. This exam will be administered by North Allegheny faculty on a single, required testing date following the completion of all summer courses, prior to the start of the new school year. Students that do not meet the minimum grade requirement of 80% in the coursework will not be permitted to sit for the acceleration exam. Accelerating through a 1.5 credit honors level science course via a compacted summer program is **extremely challenging**. Students and families must recognize acceleration should only be considered in rare circumstances, and the student is self-selecting to engage in this process. It is possible for a student to attempt acceleration and then fail to meet the course minimum grade or the cumulative test threshold. If the student does not meet both criteria, the student will be placed no higher than the course approved by their current science teacher. Waivers are not accepted in these circumstances. Students who are successful in science acceleration must still meet any prerequisites for the next appropriate course. Ninth and tenth grade students are eligible for one (and only one) science course regardless of their acceleration status. Any student who successfully accelerates through Honors Biology will be required to take the Keystone Biology Exam during the next available Keystone Exam testing window.

### **\*World Language**

Students may choose to accelerate in World Languages. Acceleration may be completed at any time but only once in a student's sequence of study. It becomes more difficult to accelerate the higher the level of language studied. Students interested in acceleration must contact the World Language Department Chairperson for more information. Students should take an approved face to face course. In extenuating circumstances, an online course may be considered only when no face to face options exist. Students must earn an 80% or higher in the accelerated course and present the course transcript in order to take the North Allegheny placement test. Students must also earn an 80% or higher on the placement test in order to be scheduled for the next level of language. If a student wishes to pursue the honors track, a waiver must be completed. No student will be scheduled for the next course until both of the requirements are completed.

***\*Please note: Courses completed as part of acceleration will not appear on the student's transcript nor will it be calculated into the QPA.***

## Schedule Changes

Schedule changes are made using a Request for Schedule Change Form. The form will be available on the PowerSchool Student and Parent portals under the Forms section.

All students have the opportunity to select courses each year based on their individual interests and needs as a learner. Once course selections are made during the scheduling process each spring, school counselors will only make changes to a student's schedule according to the following:

- Seats are available in the requested class
- Student has met the course requirements and/or prerequisites

*We strive to accommodate students' first-choice electives during the scheduling process; however, due to potential conflicts, alternative selections may be utilized. Please note that placement in an alternative elective is not considered an issue, as all courses offered provide valuable learning experiences.*

Schedule requests made for any other reason will not be honored. Specifically, requests for the following will NOT be honored:

- Change teacher
- Change lunch period
- Change order of classes

### Waiver Procedure

A waiver allows a student to enroll in a course level that supersedes the teacher- approved level. By signing a waiver, the student and parent/guardian accept full responsibility for meeting the course's content and performance standards without modifications. Waivers cannot bypass prerequisite courses, and repeated waivers into higher-level courses in the same subject may be denied. This process ensures transparency, accountability, and proper course placement.

### Steps for the Waiver Process:

- 1. Teacher Approval:** The current teacher informs the student of the approved course level.
- 2. Parent/Guardian Decision:** If the student and parent/guardian choose a higher course level:
  - They contact the teacher, school counselor, or administrator for a discussion about the approval, the student's performance, and the historical outcomes of waivers for the selected course.
- 3. Initiating the Waiver:** If a waiver is still desired, the parent/guardian will initiate and complete the waiver form via PowerSchool Parent/Guardian Portal under Forms. Please note: All waivers must be submitted electronically by **Friday, February 28, 2025 at 3pm.**
- 4. Educational Team Review:** A student submitting three (3) or more waivers will require a review from the educational team (student, parent/guardian, teacher, counselor, and administrator).
- 5. Approval and Monitoring:** The School Counseling Office will compile and distribute a list of waived students to the Department Chairperson, Administration, school counselor, and current teacher for review.



### Additional Notes:

- Students cannot waive past prerequisite courses.
- Students may not waive more than one (1) level.
- If a student withdraws from a waived course, withdrawal procedures outlined on pages 17–18 of the Program of Studies will apply.

## Add a New Course



Days 1 - 4	Yes Seats <u>must be available</u> in the requested course and all prerequisite requirements <u>must be met</u> .
Days 5 and beyond	No No course additions will be approved.

## Drop a Course

	Semester Course			Full-year Course	
	Not Waived	Waived into Course		Not Waived	Waived into Course
Days 1 - 10	Yes Students must maintain 7 (seven) credits.  The dropped course <b>will not</b> be noted on the student's transcript	Yes Students must maintain 7 (seven) credits.  The dropped course <b>will</b> be noted on transcript with a "W/letter grade at time of drop" (example W/D)	Days 1 - 20	Yes Students must maintain 7 (seven) credits.  The dropped course <b>will not</b> be noted on the student's transcript	Yes Students must maintain 7 (seven) credits.  The dropped course <b>will</b> be noted on transcript with a "W/letter grade at time of drop" (example W/D)
Days 11 and beyond	Yes Students must maintain 7 (seven) credits.  Administrative approval is required in writing.  The dropped course <b>will</b> be noted on transcript with a "W/letter grade at time of drop" (example W/D)  The dropped course grade <b>will not</b> be factored into the student's QPA.	The dropped course grade <b>will not</b> be factored into the student's QPA.  <b>Days 11 and beyond:</b> Administrative approval is required in writing.	Days 21 and beyond	Yes Students must maintain 7 (seven) credits.  Administrative approval is required in writing.  The dropped course <b>will</b> be noted on transcript with a "W/letter grade at time of drop" (example W/D)  The dropped course grade <b>will not</b> be factored into the student's QPA.	The dropped course grade <b>will not</b> be factored into the student's QPA.  <b>Days 21 and beyond:</b> Administrative approval is required.

## Level Change a Course

*Change to a lower level course*

	Semester Course			Full-year Course	
	Not Waived	Waived into Course		Not Waived	Waived into Course
<b>Days 1 - 10</b>	<p>Yes, if seats are available.</p> <p>Student's grade <b>will not</b> carry over to the new course.</p> <p>The dropped course <b>will not</b> be noted on the student's transcript.</p>	<p>Yes, if seats are available.</p> <p>Student's grade <b>will not</b> carry over to the new course.</p> <p>The dropped course <b>will</b> be noted on the student's transcript with "W/letter grade at time of change" (example W/D)</p> <p>The dropped course grade <b>will not</b> be factored into the student's QPA.</p>	<b>Days 1 - 20</b>	<p>Yes, if seats are available.</p> <p>Student's grade <b>will not</b> carry over to the new course.</p> <p>The dropped course <b>will not</b> be noted on the student's transcript.</p>	<p>Yes, if seats are available.</p> <p>Student's grade <b>will not</b> carry over to the new course.</p> <p>The dropped course <b>will</b> be noted on the student's transcript with "W/letter grade at time of change" (example W/D)</p> <p>The dropped course grade <b>will not</b> be factored into the student's QPA.</p>
<b>Days 11 and beyond</b>	No Level Changes will be approved	No Level Changes will be approved	<b>Days 21 and beyond</b>	No Level Changes will be approved	No Level Changes will be approved

## Failed Courses and Credit Recovery\*

Students who have failed a course required for graduation must work with their school counselor to plan how the course credit will be recovered. Options to recover the required graduation credits are:

- **Repeat the course** at North Allegheny Intermediate and/or Senior High School in the following academic year. Both grades will appear on the transcript. The new grade may replace the old grade in the student's grade point average calculation, if the new grade is higher than the grade earned originally.
- **Recover the credit** using Waterfront Learning, at the family's expense. Waterfront Learning is the only District approved summer school program. The failed course will be calculated into a student's grade point average. The student must pass the recovery course in order for the credit to be included on the transcript. From there, the recovered course will not be calculated into a student's grade point average. Credit recovery is only for the purpose of earning a credit for the failed course.

\*These options will impact NCAA eligibility. Individuals who desire to participate in collegiate athletics should advise their school counselor prior to finalizing an option for credit recovery.

## Early Graduation Requirements

Students generally complete their graduation requirements at the completion of their senior year; however, a student interested in graduating early must still achieve 24.0 overall credits to be eligible to graduate early. Students interested in graduating early must begin this process before scheduling their 9th grade courses to achieve all needed requirements by the District. Those requirements include the following:

- Have a discussion with the 8th, 9th or 10th grade counselor to review the Early Graduation process.
- Schedule and maintain exactly eight credits each year to complete 16 credits prior to their junior year.
- Complete an Early Graduation form with the District to certify this process and to ensure that all parties agree. These are available in the School Counseling Office.
- Students should be aware that English is a full year course that requires four years of completion. For this reason, any student interested in graduating early will need to complete their junior and senior English course during their junior year.
- No outside credits will be counted toward any District graduation requirement.
- Completion of all District requirements must be obtained. (Credits / PA Keystones)

## Grade Replacement

In some cases, students may wish to repeat an entire course for the purpose of improving their grade. Grade replacement can only be provided if the student is able to schedule the exact same course the following year. Credit is only earned once for the course. The first grade and course will remain on the transcript; however, no credit will be given and the grade will not affect the QPA. Only the grade of the second attempt at a course will be factored into the QPA. Students must receive approval from their school counselor for this option prior to the student scheduling the course.

## Honors Course Criteria

Students selecting honors courses should be mindful there are enhanced expectations for workload and rigor. The curriculum at North Allegheny School District are written using the following criteria:

- All honors courses will administer a unit-based summative assessment at the conclusion of each unit and at least one cumulative assessment each semester covering content from multiple units of study.
- All honors courses will contain learner objectives and address standards beyond the minimum academic standards for the content area. This may be reflected in additional content, faster pacing, and/or additional depth of understanding.
- All honors courses will require the student to independently synthesize the information and practice the skills necessary for mastery of material in the class. Honors students are expected to be proficient in taking and organizing notes, preparing for exams, and completing assigned novels, readings, projects, and writing assignments outside of class time.
- All honors courses will require students to relate the course content to current events or a real-world application at least once per semester by utilizing outside academic resources, including but not limited to, academic journals, experts in the field, or community resources.
- Honors courses that are performance or portfolio-based will likely require participation in several events occurring outside of the regular school day.
- All honors courses that include reading assignments will read and analyze texts that are written above grade level in each unit of study in the course.
- All honors courses will require students to regularly express their thought process, rationale, ideas and analysis in a variety of written and verbal contexts.
- All honors courses will require student work outside of class and adherence to strict deadlines for work completion in order to reinforce learning and to prepare for classroom-based learning activities.

## North Allegheny Cyber Academy (NACA)

In partnership with our online learning provider, Waterfront Learning, the North Allegheny School District offers K-12 resident students the opportunity to participate in full-time online school. Courses offered through NACA will be completely asynchronous. NACA provides students the opportunity to complete school work using online curricula at home, while allowing NACA students the opportunity to participate in extracurricular as well as school-sponsored activities in the North Allegheny School District. In addition, NACA students who complete all of the program requirements and meet the NASD graduation requirements, will be awarded a North Allegheny School District diploma. NACA students are eligible to participate in North Allegheny High School commencement exercises.

High School students who are completing their courses through NACA must fulfill all graduation requirements outlined in the 2025-2026 North Allegheny School District Program of Studies found on page 6. NACA students in grades 9-12 are encouraged to contact their school counselor with any questions regarding these requirements. NACA students are required to select only the courses listed in the NACA Course Listings for 2025-2026. NACA High School students have the opportunity to select elective courses in addition to the required courses within each department.

## NCAA Course of Study for Athletes

Students who plan to participate in Division I, II, or III college athletics are responsible for planning their academic studies in accordance with the NCAA standards. For information about these standards as well as test scores (SAT and ACT) and GPA (grade point average) required by the NCAA, please check the [NCAA website](#). Students who wish to play for Division I or II colleges must begin as a ninth grade student to pursue an NCAA accepted course of study and register with the NCAA by May of their junior year. College coaches cannot recruit seniors in high school until those seniors have registered with the NCAA. Students register using the NCAA website referred to above. The NCAA Clearinghouse requires that prospective student athletes send an official copy of their transcript and SAT and/or ACT scores. A list of courses that are approved through the NCAA is available on the NCAA website.

North Allegheny students interested in competing at the collegiate level, should sign up for the NCAA monitoring course (NCAA). Although this course does not formally meet and carries no credit, enrollment will allow high school administrators, school counselors and coaching staff to guide you through the process of being cleared through the NCAA. Enrollment in this course in no way guarantees you will be eligible to compete at the collegiate level, however, this course will be used to share information with students and families.

To tell if a course meets NCAA eligibility, look for “NCAA” next to the course descriptions. The following are updates for any college-bound student-athlete first entering an NCAA Division I college or university on or after August 1, 2024. Students will need to meet new academic rules to receive athletics aid (scholarships), practice, or compete during their first year. Students may be considered either a Full Qualifier, Academic Redshirt, or a Non-qualifier. Please visit [www.eligibilitycenter.org](http://www.eligibilitycenter.org) for more details.

It is the students’ and parent(s)/guardian(s) responsibility to assure that the courses in which they enroll will be acceptable to the NCAA, and that they meet the other requirements as defined by that association. If a student or parent is unsure of course approval/non approval status, they should check with their school counselor prior to enrolling in the class. Student-athletes aspiring to play college Division I or Division II athletics should obtain a copy of the “NCAA Guide for the College-Bound Athlete” from the School Counseling Office or from the NCAA [website](#).

The NCAA list of approved courses is also available on the NCAA [website](#).

The NCAA can be reached by calling: **1-877-262-1492** Toll Free

The North Allegheny High School Code is: **393745**

## Pennsylvania Academic Standards for Career Education and Work

Through a variety of resources, North Allegheny School District students explore post high school opportunities and careers. Introducing the elementary career portfolio, utilizing the [Pennsylvania Department of Education's Academic Standards for Career Education and Work](#), exposing students to Naviance Student in 6th grade, and the Pre-ACT in grade 10, school counselors and teachers guide students through the maze of examining potential career interests. North Allegheny provides a wide variety of content via all curricular areas to assist students in identifying potential career interests. As you consider course selections for the upcoming school year, please use this document to assist you with selecting courses that best fit your potential future career interests.

### Naviance Career Clusters

Career clusters are a way of grouping careers with common features and skills. Careers grouped into the same cluster typically require similar education and training. Exploring clusters can be a useful way to find a good career match, especially if you have general areas of interest but are not sure what specific careers match those interests. Career clusters can also help you better understand how your coursework in school can prepare you for certain types of careers. To further explore career clusters and their connection to North Allegheny coursework, log in to Naviance through your *Tiger ID* or see your *school counselor for more information*.



Agriculture, Food and Natural Resources



Arts, Audio/Video Technology and Communications



Education and Training



Government and Public Administration



Hospitality and Tourism



Information Technology



Manufacturing



Science, Technology, Engineering and Mathematics



Architecture and Construction



Business Management and Administration



Finance



Health Science



Human Services



Law, Public Safety, Corrections and Security



Marketing



Transportation, Distribution and Logistics



## **Aerospace Science and Leadership (AFJROTC)**

Students interested in leadership skills development, opportunities to serve your community, travel to local military bases and experience curriculum in action while participating in extracurricular activities like Space Exploration, Honor Guard, Air Rifle Competitions and even fly in an airplane should consider AFJROTC.

The Air Force Junior ROTC (AFJROTC) mission aspires to develop citizens of character dedicated to serving their nation and community. AFJROTC is an academic program designed to instill the values of citizenship, service to the United States, and personal responsibility through education and mentoring for students in grades 9-12. This military-based instruction combines academics and leadership development requirements with a curriculum including an introduction to aviation history, aviation and space science, college and career readiness, global studies, practical leadership, and health and wellness.

In addition to classroom academics, leadership components include wearing the AFJROTC cadet uniform. The weekly uniform requirement is designed to teach attention to detail, discipline, and dedication to duty. Uniforms will be issued at no cost. Students will participate in Drill and Ceremony providing the opportunity to apply individual skills as a team fostering esprit de corps and unit cohesion. Students should also be prepared to adhere to United States Air Force Junior ROTC grooming (hair) standards within the first four (4) weeks of school.

To encourage greater commitment to community service, cadets will be expected to participate in a minimum of 12 community service hours. Cadets will have a variety of AFJROTC opportunities throughout the academic year to earn these hours which often involve after school activities.

***\*NO MILITARY OBLIGATION IS IMPOSED, EXPECTED OR INCURRED, FOR PARTICIPATING STUDENTS***

<u><b>CREDIT</b></u>	<u><b>COURSE TITLE</b></u>	<u><b>COURSE #</b></u>	<u><b>OPEN TO GRADES</b></u>
1.0	AF JROTC ASL 100	9414	9
1.0	AF JROTC ASL 200	9415	10
1.0	AF JROTC ASL 300	9416	11
1.0	AF JROTC ASL 400	9417	12

## Aerospace Science and Leadership (AFJROTC)

<b>Course Title:</b>	AF JROTC ASL 100	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	9414	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><b>Aerospace Science 100: Milestones in Aviation History</b></p> <p>The aerospace science component, <i>Milestones in Aviation History</i>, focuses on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The objective of this course is to bring alive significant discoveries in flight. The textbook tells a story of why we are so proud of our Air Force heritage – laying the foundation for future aerospace science courses. Throughout the course, 21<sup>st</sup> Century learning is adopted with readings, video clips, hands-on learner centered activities, and chapter project-based learning opportunities.</p> <p><b>Leadership Education 100: Traditions, Wellness and...</b></p> <p>The leadership education component, <i>Traditions, Wellness, and Foundations of Citizenship</i> will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC in all services. It introduces key military customs and courtesies, how to project a positive attitude and examine the principles of ethical and moral behavior. It provides strategies for academic study and note taking as well as practicing effective methods to recognize bullying and advocate for the prevention of that type of behavior. Cadets will also study citizenship through knowledge of civics at the local, state, and national levels. Military drill and ceremonies will be taught at the followership level.</p> <p>Military drill and ceremonies will be taught at the followership level. THE AFJROTC 30 STEP DRILL SEQUENCE will be performed by cadets at this level. Wellness will be conducted one day per week, focusing on improvement; using the instructor identified exercises from the AFJROTC Physical Fitness Test (Instructions), at the beginning and end of the academic year. This is a blended class, experienced with 10th grade cadets. Curriculum associated with ASL 100 and 200 will be rotated each year to ensure cadets receive a well-rounded AFJROTC experience.</p>		

## Aerospace Science and Leadership (AFJROTC)

<b>Course Title:</b>	AF JROTC ASL 200	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	9415	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	NO
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><b>Aerospace Science 100: Milestones in Aviation History</b></p> <p>The aerospace science component, Milestones in Aviation History, focuses on the development of flight throughout the centuries. It starts with ancient civilizations and flight, then progresses through time to future developments in aerospace, with an introduction into cyber technologies. The objective of this course is to bring alive significant discoveries in flight. The textbook tells a story of why we are so proud of our Air Force heritage – laying the foundation for future aerospace science courses. Throughout the course, 21<sup>st</sup> Century learning is adopted with readings, video clips, hands-on learner centered activities, and chapter project-based learning opportunities.</p> <p><b>Leadership Education 100: Traditions, Wellness and...</b></p> <p>The leadership education component, Traditions, Wellness, and Foundations of Citizenship will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC in all services. It introduces key military customs and courtesies, how to project a positive attitude and examine the principles of ethical and moral behavior. It provides strategies for academic study and note taking as well as practicing effective methods to recognize bullying and advocate for the prevention of that type of behavior. Cadets will also study citizenship through knowledge of civics at the local, state, and national levels. Military drill and ceremonies will be taught at the followership level.</p> <p>Military drill and ceremonies will be taught at the followership level. THE AFJROTC 30 STEP DRILL SEQUENCE will be performed by cadets at this level. Wellness will be conducted one day per week, focusing on improvement; using the instructor identified exercises from the AFJROTC Physical Fitness Test (Instructions), at the beginning and end of the academic year. This is a blended class, experienced with 10th grade cadets. Curriculum associated with ASL 100 and 200 will be rotated each year to ensure cadets receive a well-rounded AFJROTC experience.</p>		

## Aerospace Science and Leadership (AFJROTC)

<b>Course Title:</b>	AF JROTC ASL 300	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	9416	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><b>Aerospace Science 200: The Science of Flight</b></p> <p>The aerospace science component of this course, <i>The Science of Flight: A Gateway to New Horizons</i> is an introductory aviation course which has a customized textbook that focuses on how planes fly, how weather conditions affect flight, flight, flight and the human body (aerospace physiology), and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses. It is aligned with the National Science and Education Standards, the Math Standards and Expectations, and ISTE; National Educational Technology Standards for Students.</p> <p><b>Leadership Education 400: Principles of Management</b></p> <p>The leadership education component, <i>Principles of Management</i>, provides cadets exposure to the fundamentals of management. The text contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. This course, along with the practical application opportunities afforded them in AFJROTC, will equip them with the qualities needed to serve in leadership positions within the corps. The curriculum offers ethical dilemmas, case studies, and role play activities built into the lessons. These activities are based on real life experiences and will allow the students the opportunity to practice what they learn by getting involved in discussions and through expressing their opinions while listening to the opinions of others.</p> <p>Additionally, command characteristics used with military drill and ceremony teams will be experienced. Performance of THE AFJROTC 30 DRILL SEQUENCE will be evaluated by cadet leaders at this level. Wellness will be conducted one day per week, focusing on improvement; using the instructor identified exercises from the AFJROTC Physical Fitness Test (Instructions), at the beginning and end of the academic year. This is a blended class, experienced with 12th grade cadets. Curriculum associated with ASL 300 and 400 will be rotated each year to ensure cadets receive a well-rounded AFJROTC experience.</p>		

## Aerospace Science and Leadership (AFJROTC)

<b>Course Title:</b>	AF JROTC ASL 400	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	9417	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><b>Aerospace Science 200: The Science of Flight</b></p> <p>The aerospace science component of this course, <i>The Science of Flight: A Gateway to New Horizons</i> is an introductory aviation course which has a customized textbook that focuses on how planes fly, how weather conditions affect flight, flight, flight and the human body (aerospace physiology), and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses. It is aligned with the National Science and Education Standards, the Math Standards and Expectations, and ISTE; National Educational Technology Standards for Students.</p> <p><b>Leadership Education 400: Principles of Management</b></p> <p>The leadership education component, <i>Principles of Management</i>, provides cadets exposure to the fundamentals of management. The text contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. This course, along with the practical application opportunities afforded them in AFJROTC, will equip them with the qualities needed to serve in leadership positions within the corps. The curriculum offers ethical dilemmas, case studies, and role play activities built into the lessons. These activities are based on real life experiences and will allow the students the opportunity to practice what they learn by getting involved in discussions and through expressing their opinions while listening to the opinions of others.</p> <p>Additionally, command characteristics used with military drill and ceremony teams will be experienced. Performance of THE AFJROTC 30 DRILL SEQUENCE will be evaluated by cadet leaders at this level. Wellness will be conducted one day per week, focusing on improvement; using the instructor identified exercises from the AFJROTC Physical Fitness Test (Instructions), at the beginning and end of the academic year. This is a blended class, experienced with 12th grade cadets. Curriculum associated with ASL 300 and 400 will be rotated each year to ensure cadets receive a well-rounded AFJROTC experience.</p>		

# Business, Computer and Information Technology (BCIT)

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Intro to Business	0201	9,10
1.0	Marketing	0202	11,12
0.5	Entrepreneurship	0203	11,12
0.5	Sports and Entertainment Management	0204	11,12
0.5	Business Management	0205	11,12
0.5	Business Communication (CHS)	0206	11,12
0.5	Honors International Business	0207	11,12
0.5	Principles of Accounting 1 (CHS)	0211	10,11,12
0.5	Principles of Accounting 2 (CHS)	0212	10,11,12
0.5	Honors Advanced Accounting 1 (CHS)	0213	11,12
0.5	Honors Advanced Accounting 2 (CHS)	0214	11,12
0.5	Honors Finance and Investments	0215	11,12
0.5	Microsoft Office Applications 1	0221	9,10,11,12
0.5	Microsoft Office Applications 2	0222	11,12
0.5	Web Page Design (CHS)	0223	11,12
0.5	Cybersecurity	0224	11,12
0.5	Intro to Information Science (CHS)	0225	11,12
0.5	Personal Finance Literacy	0231	11,12
1.0	Career Development	0232	12
1.0	Co-op	0241	12

**(CHS) Indicates College in High School Course**

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Intro to Business	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0201	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Introduction to Business</i> explores current business topics, types of business organization, economic systems, and personal financial planning. Decision-making skills, economics, entrepreneurship, management styles, investment securities, consumerism, banking, money management and taxes will be studied in this dynamic course. In addition, students will participate in a web-based simulation, Family Financial Management. Making wise decisions while establishing short- and long-term financial goals are essential “life skills” that young people often fail to benefit from during their early wealth-building years.</p>		

<b>Course Title:</b>	Marketing	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0202	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>More than half of all branded emails are opened on mobile devices. The digital age we live in has created new challenges for marketers. This course includes the core functions of marketing, as well as up-to-date marketing trends essential for the operation of a business. Students will have an opportunity to apply marketing concepts through interactive enrichment activities, while improving their interpersonal and communication skills. The many career opportunities available in this broad field of study will be explored. Upon finishing this course, students will have the skills necessary to research job leads, complete employment applications, and successfully interview for a job with a working resume in hand. This class is recommended for students considering a Marketing/Business Major in college or for those who would like to become a better informed consumer.</p>		

<b>Course Title:</b>	Entrepreneurship	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0203	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course introduces students to the fundamental principles of entrepreneurship. Students learn the process for conceiving, creating, and managing their own business venture. From an entrepreneurial perspective, students gain skills in finance, accounting, marketing, management, and general business skills. Students will see the economic and social contributions entrepreneurs provide to society. <i>Entrepreneurship</i> is an excellent course for students who would like to start or manage a business.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Sports and Entertainment Management	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0204	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Offered in over 500 universities, <i>Sports &amp; Entertainment Management</i> has become one of the most popular fields of study at the college level. This introductory course emphasizes basic management concepts and principles as they relate to the business of sports &amp; entertainment. Students will be introduced to topics including marketing and promotions, management and supervision, ethics, and event planning. There is focus on amateur vs professional sports; Title IX, the NIL, and leadership in the entertainment industry. Students will develop critical thinking skills and improve decision-making and communication abilities. College exploration and career outlook will be researched. Current and future trends in the sports &amp; entertainment industry will be explored, and job shadowing opportunities offered. Incorporated into this curriculum will be field trips and speakers from industry organizations such as professional, college, and amateur sports teams as well as the local entertainment sector. The mission of this course is to provide future managers in the field with a solid business foundation as well as knowledge of the unique facets of the Sports and Entertainment Industries.</p>		

<b>Course Title:</b>	Business Management	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0205	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Business Management</i> is an introduction to business concepts, management skills, and management theories. This course covers four functions of management: planning, organizing, leading, and controlling. Students learn how to think strategically to achieve organizational goals and maximize resources in the business environment. Understanding issues involved in managing a business as well as being managed will be discussed. Students will gain first-hand experience developing skills necessary to be effective contributors within an organization. Decision-making techniques and positive leadership qualities will be reinforced. Additional topics include: the global business environment, the economy, mergers and acquisitions, ethics and social responsibility, stock market and securities, and current trends in management practice and theory.</p>		



## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Business Communications (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0206	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Effective communication skills are vital to both business and personal success. They foster cooperation, productivity, and teamwork within an organization. With the surge in technology, young people need to learn and practice successful speaking skills for the business environment. Students may be able to text and post a thought yet have difficulty speaking it. Possessing essential interpersonal and presentation skills will enhance one's opportunities in life. Developing the ability to effectively and appropriately express a point in different situations to a varied audience is essential for growth and advancement in the business world and in life.</p> <p><i>Business Communications</i> explores barriers to effective communication and ways to overcome these barriers, successful listening and presentation skills, and the use of technology and social media in business. Students learn to analyze and relate to varied audiences, and to understand the impact gender and cultural diversity can have on communication. Modern technology tools will be used for communicating and students will understand the concept of building their brand. This course teaches effective communication skills that will help students achieve goals, secure employment, and adapt to environments.</p>		

<b>Course Title:</b>	Honors International Business	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0207	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>'B' or better in prior Social Studies Course</li> </ul>		
	<p><i>Honors International Business</i> provides an up-to-date and complete exploration of international business issues and practices. With a strong foundation of international business theory, this course includes current examples, case studies, and insights showing how global businesses apply these concepts. The impact and controversies of international business practices on countries, corporations, and individuals will be discussed. Content will examine the role and significance of culture and include an exploration of world maps, time zones, and currencies in order to help students develop and refine a global perspective. This course incorporates a global approach, with attention given to topics essential for an international manager in the global business environment.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Principles of Accounting 1 (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0211	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Accounting is an integral part of business that has been referred to as the “language of business.” <i>Principles of Accounting 1</i> provides students with an understanding of the complete accounting cycle as it applies to a proprietorship. This course will benefit students who plan to major in Accounting, Marketing, Business Management, or Finance in college, since the subject is a core requirement for business majors. This course provides foundations in accounting principles, applications, and terminology. Computer integration is also incorporated using Microsoft Excel. Upon successful completion of Principles of Accounting 1 and 2, students are eligible to enroll in Honors Advanced Accounting 1 and 2.</p>		

<b>Course Title:</b>	Principles of Accounting 2 (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0212	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>‘C’ or better in Principles of Accounting 1</li> </ul>		
	<p><i>Principles of Accounting 2</i> expands on topics learned in Principles of Accounting 1 while adding new topics about managerial accounting, cost accounting, financial analysis, and corporate accounting procedures. Emphasis is placed on accounting for a merchandising business organized as a corporation. For problem-solving, students continue applications of accounting principles using Microsoft Excel. This course is beneficial if considering a major in accounting or business at the college-level. Upon successful completion of Principles of Accounting 2, students are eligible to enroll in Honors Advanced Accounting 1 and 2.</p>		

<b>Course Title:</b>	Honors Advanced Accounting 1 (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0213	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>‘C’ or better in Principles of Accounting 2</li> </ul>		
	<p><i>Honors Advanced Accounting 1</i> is course 1 of 2 in accounting principles. It teaches students accounting concepts and principles and their underlying theories. This course begins with a review of the Accounting Cycle and the financial statements for a Sole Proprietorship. Greater emphasis is placed on analysis of data used in decision-making. In-depth coverage of course topics include merchandising operations and the accounting for inventory and plant assets.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Honors Advanced Accounting 2 (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0214	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• 'C' or better in Honors Advanced Accounting 1</li> </ul>		
	<p><i>Honors Advanced Accounting 2</i> is a continuation of Honors Advanced Accounting 1. In-depth coverage of course topics include the disposal of plant assets and intangibles, current liabilities with an emphasis on accruals and long-term liabilities (Bonds), and corporations paid-in capital and their balance sheet. Students will also learn accounting for cash dividends, corporations' effects on retained earnings and their income statement, accounting for stock dividends and treasury stock, cash flow statements, and partnerships.</p>		

<b>Course Title:</b>	Honors Finance and Investments	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0215	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• 'B' or better in prior Mathematics Course</li> </ul>		
	<p><i>Honors Finance and Investments</i> introduces students to the three areas of the finance discipline: Financial Institutions, Investments, and Business Finance. Finance is the study of money and its management. Although finance is a separate academic discipline, its roots are in accounting and economics. This course provides a breadth of knowledge of finance and gives a solid foundation to build in other areas of business. Topics include, but are not limited to, the role of financial markets, the role of money, the role of interest rates, the role of investment banks, financial regulations, banking, the Federal Reserve, monetary policy, currency, the time value of money, the features of stock, stock valuation, the features of bonds, bond pricing and yields, convertible securities, investment risk, investment returns, and investment companies. Students will compete amongst their classmates in a virtual stock market challenge and will learn the importance of developing a diversified portfolio to maximize growth potential while protecting their wealth.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Microsoft Office Applications 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0221	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Microsoft Office Applications 1</i> is a hands-on course in which students will use Microsoft Office and the Windows operating environment. An online interactive textbook will personalize the experience with assignments that guide students to analyze, apply, and improve critical thinking skills, while measuring outcomes utilizing Word, Excel, and PowerPoint. The course will include three components of the Microsoft Office suite: Word where students will become proficient in completing basic and advanced applications such as document formatting, tabs, tables, graphics, research papers, and basic web integration; Excel, where students create spreadsheets and graphs to analyze and solve business-related applications; and PowerPoint, where students learn how to create presentation slides combining text, charts, drawings, and clip art. Students will acquire software skills that prepare them for college and beyond.</p>		

<b>Course Title:</b>	Microsoft Office Applications 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0222	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>'C' or better in Microsoft Office Applications 1</li> </ul>		
	<p><i>Microsoft Office Applications 2</i> will take skills acquired in Microsoft Office Applications 1 to a higher level. In this course students will complete advanced applications in Word, Excel, and PowerPoint. The course will include three components of the Microsoft Office suite: Word, where students become proficient in creating a resume, templates, and using the mail merge feature to generate letters, labels and directories; Excel, where students create, sort and query tables, as well as generate spreadsheets and workbooks with amortization schedules; and PowerPoint, where students will learn how to create and format information graphics, collaborate on and deliver presentations while navigating hyperlinks and action buttons. Students will acquire software skills that prepare them for college and beyond.</p>		

<b>Course Title:</b>	Web Page Design (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0223	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Web Page Design</i> introduces students to basic web design using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). This course teaches how to create webpages from scratch using the most current standards. Throughout the course students plan and design effective web pages; implement web pages by writing HTML and CSS code; enhance web pages with the use of page layout techniques, basic JavaScript, text formatting, graphics, images, and multimedia; and produce a functional, multi-page website. Students will also learn to apply responsive design principles for an optimal viewing experience across a range of devices to achieve multi platform display. Prior knowledge of HTML or web design is not required.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Cybersecurity	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0224	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Much of today's society exists within the digital world. Business operations, financial institutions, health information, and critical infrastructure all live in cyberspace, the new frontier, where complex cyberattacks are becoming more frequent each day. <i>Cybersecurity</i> will examine cybersecurity, specifically preventative techniques used to protect networks, programs and data from attack, damage, or unauthorized access. Students will gain basic knowledge of the present-day cyber security landscape across different sectors, including cyber threats, targets, attacks, and preventative measures. Career options in the cybersecurity field are vast – with job openings in almost every industry. Students taking this course do not need a background in information technology.</p>		

<b>Course Title:</b>	Intro to Information Science (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0225	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Intro To Information Science</i> provides students insight into challenges that IT professionals face in the modern workplace. Information Science looks at the balance between technology helping solve problems vs creating more problems. While technology may modernize business efficiency, enhance creativity, and assist humans with everyday tasks, it also collects troves of data which may breach privacy. Topics include Human Computer Interaction, Representing Information Digitally, Computer Operations, Privacy and Digital Security, and Databases.</p> <p>In addition, students may obtain three college credits through the University of Pittsburgh. To obtain college credit, the student must successfully complete the course as specified by the University, and pay tuition charged by the University.</p>		

## Business, Computers and Information Technology (BCIT)

<b>Course Title:</b>	Personal Financial Literacy	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0231	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p><i>Personal Financial Literacy</i> equips students with introductory personal financial skills and knowledge needed for success in today's economy. Students learn how to create a personal budget, choose and manage a credit card, understand credit scoring and credit reports, and prepare basic personal tax forms. In addition, this course explores true costs associated with automobiles, home mortgages and postsecondary education.</p> <p>Upon completion of the course, students will have developed a personal financial plan. Having basic financial planning skills can help individuals and families meet their short-term obligations and maximize their long-term financial well-being. All assessments are individualized and project-based, allowing the course to be authentic to each learner. This course is recommended for every student.</p>		

<b>Course Title:</b>	Career Development	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0232	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Developing life skills in a changing world is very important, yet often overlooked. The more prepared students are to handle the daily stresses of becoming an adult, the more successful they will become. In <i>Career Development</i>, students gain practical experience through topics including: career exploration and advancement, resume writing, interviewing skills, time and money management, banking, apartment pursuits, and more. These skills will be explored in-depth and give students an understanding of future needs. The importance of effective communication skills in developing positive personal and career-related relationships will be addressed. Students will have the opportunity to participate in a job shadowing experience related to their career interest.</p> <p>For an additional credit each semester, students have the opportunity to work at an approved job for an average of 15 hours per week and may be released early from school each day under the supervision of the Co-op coordinator. Co-op work experience is NOT REQUIRED for students to take the class. Students with a full schedule can participate in co-op as well.</p>		

<b>Course Title:</b>	Co-op	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0241	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Simultaneous enrollment in Career Development is required</li> </ul>		
	<p>For an additional credit, students enrolled in Career Development can receive early release from school each day to fulfill the requirements of <i>Co-op</i>. Students must work an average of 15 hours per week at an approved training facility. It is encouraged to work at a job related to their career goals. The assistance of a North Allegheny Co-op coordinator can be used as a resource for students when trying to find employment. The work experience is supervised by both the school's coordinator as well as the student's onsite manager. If students have a full academic schedule, they may still participate in Co-op.</p>		

## English Language Arts

<b><u>CREDIT</u></b>	<b><u>COURSE TITLE</u></b>	<b><u>COURSE #</u></b>	<b><u>OPEN TO GRADES</u></b>
1.0	Essentials English 1 (IMPACT) *	0401	9
1.0	English 1	0402	9
1.0	Academic English 1	0403	9
1.0	Honors English 1	0404	9
1.0	Essentials English 2 (IMPACT) *	0411	10
1.0	English 2	0412	10
1.0	Academic English 2	0413	10
1.0	Honors English 2	0414	10
0.5	Creative Writing	0441	9,10
0.5	Intro to Digital Media Production - NAEye TV	0442	9,10
0.5	Intro to Film	0443	9,10
0.5	Intro to Journalism - NAEye News	0444, 0445	9,10
0.5	Intro to Theater	0446	9,10
0.5	Leadership 1	0447	9,10
0.5	Leadership 2	0448	10
0.5	Speech and Debate	0449	9,10
1.0	Yearbook	0451, 0452	9,10
1.0	Essentials English 3	0421	11
1.0	English 3	0422	11
1.0	Academic English 3	0423	11
1.0	Honors English 3	0424	11
1.0	AP English 3: Language and Composition	0425	11

**\* These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.**

**(CHS) Indicates College in High School Course**

## English Language Arts

<b><u>CREDIT</u></b>	<b><u>COURSE TITLE</u></b>	<b><u>COURSE #</u></b>	<b><u>OPEN TO GRADES</u></b>
1.0	Essentials English 4	0431	12
1.0	English 4	0432	12
1.0	Academic English 4	0433	12
1.0	Honors English 4	0434	12
1.0	AP English 4: Literature and Composition (CHS)	0435	12
0.5	Acting: Taking the Stage	0461	11,12
1.0	Broadcasting	0463	11,12
0.5	Contemporary Novels	0464	11,12
0.5	Creating Writing 2	0465	11,12
0.5	Film and TV Production 1	0473	11,12
0.5	Film and TV Production 2	0474	11,12
0.5	Film and TV Production 3	0475	11,12
0.5	Film Studies (CHS)	0476	11,12
0.5	Honors Argument (CHS)	0469	11,12
1.0	Honors Journalism 11 (CHS), 12	0471, 0472	11,12
0.5	Speech (CHS)	0477	11,12
1.0	Yearbook	0478,0479	11,12
1.0	English as a Second Language	0489	9,10,11,12
1.0	Applied ELA	0492, 0493, 0494, 0495	9, 10, 11, 12, 12+
1.0	English 9, 10, 11, 12	0496, 0497, 0498, 4099	9, 10, 11, 12

**(CHS) Indicates College in High School Course**



## English Language Arts

<b>Course Title:</b>	Essentials English I (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0401	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>In Essential English 1, students will work to improve their language arts skill set. The main areas of study include reading comprehension, analysis, writing, grammar, vocabulary development, speaking, and listening. Instruction is differentiated to meet students' individual needs and readiness and is designed to help students make connections between reading, writing, literature, and their own lives. Students can expect to receive extra teacher support, small group instruction, and individual remediation time to improve their areas of deficiency. The course will move at a slower pace compared to the other 9th grade English courses, but it will cover the same curriculum. Through various modern and classic pieces of literature- including short stories, novels, films, poems, and non-fiction articles- students will work to increase their knowledge and apply the skills learned.</p>		

<b>Course Title:</b>	English 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0402	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion of English Language Arts 8</li> </ul>		
	<p>In this college preparatory communications course, students develop their reading, writing, listening, speaking, and critical thinking skills. To enhance vocabulary skills, students familiarize themselves with words from within the contexts of various reading assignments. Students study grammar, usage, and mechanics integrated within reading and composition. Students also read and analyze fiction, non-fiction, poetry, the novel, and drama. Students follow the writing process while composing core writing assignments and timed writing prompts. This course's units are organized around narrative, persuasive, and informational modes of writing. Students also apply their knowledge of the library and its technology in a workshop setting.</p>		

<b>Course Title:</b>	Academic English 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0403	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in English Language Arts 8</li> </ul>		
	<p>Academic English I is a college preparatory course in which students will read, analyze, and compose essays about a wide variety of literature, while also making sophisticated, meaningful connections between that literature and their own lives. The class is structured with a great deal of writing, group work, and inquiry-based discussions, in which knowledgeable participation is imperative. Students explore Unit Questions through inquiry-based practices and project-based learning.</p>		

## English Language Arts

<b>Course Title:</b>	Honors English 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0404	<b>STEM</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 93% in English Language Arts 8</li> </ul>		
	<p>This is a survey course that features advanced study of fiction and nonfiction texts and narrative, informational, and argumentative modes of writing. Students should be comfortable with independent reading and higher order thinking tasks. Students will work independently and collaboratively throughout the year on research, analysis, formal writing, project-based activities, and inquiry-based discussions, in which knowledgeable participation is imperative. As an honors level course, students will be held to higher expectations and should expect the course to move at a faster pace. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

<b>Course Title:</b>	Essentials English 2 (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0411	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>In Essential English 2, students will focus on improving reading, writing, speaking, and listening skills through a variety of texts that are geared toward students' abilities and interests in a highly structured atmosphere. Students participate in directed-reading activities, in class discussions, guided paragraph and essay writing, and vocabulary exercises centered on context clues, roots, and prefixes to increase vocabulary knowledge and usage. Through high interest and classical literature--including short stories, non-fiction, drama, poetry, film, and novels--students increase knowledge, comprehension, application, analysis, and evaluation skills. All students will take the Literature Keystone Exam at the end of the course.</p>		

<b>Course Title:</b>	English 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0412	<b>STEM</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 92% in Essentials English 1</li> </ul>		
	<p>In this college preparatory course, students continue to develop their reading, writing, listening, speaking, and critical thinking skills. Students study grammar, usage, and mechanics integrated within reading and composition. Students also read and analyze fiction, non-fiction, poetry, the novel, and drama. Students follow the writing process while composing core writing assignments and timed writing prompts. This course utilizes the same rigorous academic content featured in the Academic English 2 curriculum but with additional support in place for students.</p>		

## English Language Arts

<b>Course Title:</b>	Academic English 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0413	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 75% in Academic English 1 OR</li> <li>• Minimum of 95% in English 1</li> </ul>		
	<p>Academic English 2 is a college preparatory course in which students will engage in a comprehensive study of literature and composition. Students will develop, refine, and polish writing skills through informational writing, persuasive writing, and narrative writing. Grammar and vocabulary skills will be strengthened through an integrated approach to reading and writing. Longer texts include a variety of genres such as literary nonfiction, dystopian fiction, memoir, vignette, and drama. Students will complete timed readings and writings throughout the course in preparation for the Keystone Literature Exam. All students will take the Keystone Literature Exam at the end of this course.</p>		

<b>Course Title:</b>	Honors English 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0414	<b>STEM</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 85% in Honors English 1 OR</li> <li>• Minimum of 95% in Academic English 1</li> </ul>		
	<p>This course undertakes a comparative analysis of literature from and about a variety of cultures, including classical Greek and Roman, as well as medieval, Elizabethan, and various pieces of world literature. Students develop their writing craft through rigorous practice in various modes supported by a series of writers' workshops. Added emphasis is placed on close reading, 21st century communication (collaborative presentations, podcasting, website building, video creation), and in-class discussions. All students will take the Literature Keystone Exam at the end of the course. Honors English 2 is designed for students interested in a challenging, accelerated study of literature and who intend to advance to Honors English 3 or AP English 3. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

<b>Course Title:</b>	Creative Writing	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0441	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>This elective course is open to all North Allegheny Intermediate students who are interested in developing and expressing their own creative voice through language. Students will have the opportunity to explore a variety of writing that includes different types of poetry and short stories, as well as experiment with new topics, genres, and media of interest. Students will also become part of a writing community through activities and workshops.</p>		

## English Language Arts

<b>Course Title:</b>	Intro to Digital Media Production: NAEye TV	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0442	<b>STEM</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course provides students with an introduction to aspects of modern digital media creation and design. Students explore elements of video and audio design, production, and editing; television broadcasting; podcasting; and more. Students should be comfortable with the basics of operating audio-visual equipment and appearing on camera. The course collaborates closely with Intro to Journalism to publish multimedia content for the school newspaper, <i>The NAEye</i>.</p>		

<b>Course Title:</b>	Introduction to Film	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0443	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course introduces students to the art of analysis and how to approach a film with a critical eye. Students will be exposed to various genres of film while learning different frameworks for interpretation and investigation. Throughout the course, students will investigate the narrative structure of movies and how the cinematic and theatrical elements work together to produce motion pictures as literature. Students can expect to learn the background and history of the various genres. As they actively view, they will take notes and complete analysis assignments that will be used to create project-based summative assessments after each unit of study. Major highlights of the class include the opportunity to explore screenwriting, producing and directing your own short film, and sharing your published film with the class as the end-of-semester final project. Ultimately, this course will give students an opportunity to explore how films are a reflection of various cultures and how they shape society.</p>		

<b>Course Title:</b>	Introduction to Journalism: NAEye News (FY/PT)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0444, 0445	<b>STEM</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Students explore the tenets and skills of modern journalism through the management and publication of NAI's online student newspaper, <i>The NAEye</i>. Students should be comfortable with writing and researching independently, conducting face-to-face interviews, and seeing their writing through multiple revisions as part of the writing and publishing process. Interest and previous experience in journalistic writing, podcasting, and photography are encouraged, but not required. Exemplary student writings are submitted for local and national recognition in the field of student journalism.</p>		

## English Language Arts

<b>Course Title:</b>	Introduction to Theater	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0446	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is an introduction to the basic elements of theater from the history of theater to the wide world of acting and stage presence. Students can expect to be actively involved in their learning from participating in actors' workshops to researching and leading their own lessons and even directing dress rehearsals. There is no prior acting experience required to take this course, but students should be aware that they need to spend time memorizing their lines and learning stage directions and blocking. Throughout the semester, students will explore the following units: the history of theater, physical acting, vocal acting, improvisation, pantomime, monologues, group scenes, dramatic poetry readings, parody/satirical acting, screenwriting, and directing. The semester will culminate with students working together to perform one-act plays</p>		

<b>Course Title:</b>	Leadership 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0447	<b>STEM</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>In this semester course, students learn elements of leadership with an emphasis on skills that promote their success in leadership situations. Students will explore units on goal setting, leadership styles, project planning, time management, and communication. All students will plan, implement, and evaluate a leadership project that will be presented to their peers. This course is entirely hands-on and class participation is a portion of each student's grade. Students who thrive in this course have a strong academic foundation, possess strong written and oral communication skills, are comfortable speaking in front of groups, and are self-motivated and full of initiative.</p>		

<b>Course Title:</b>	Leadership 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0448	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Leadership 1</li> </ul>		
	<p>Using a team approach, Leadership 2 students apply learned Leadership 1 skills as both leaders and followers in school-wide projects. Students explore experiences in motivation, group dynamics, team building, facilitating, giving feedback, decision-making, problem-solving, and risk-taking. Student leaders experience numerous application activities via icebreakers, in-class projects, and "hands-on" experiences.</p>		

## English Language Arts

<b>Course Title:</b>	Speech and Debate	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0449	<b>STEM</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed to help students gain confidence in public speaking skills, improve communication skills, and strengthen critical thinking skills. Students will present a variety of speeches, including prose reading, impromptu/extemporaneous speaking, dramatic/humorous interpretation, original oratory, and Lincoln-Douglas Debate. Students are required to memorize a 6-10 minute speech. Student participation in competitive tournaments is encouraged, but not required. This course is highly recommended for all levels.</p>		

<b>Course Title:</b>	Yearbook	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0451, 0452	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>The NAI Yearbook Staff is responsible for the time capsule that is the traditional high school yearbook. Students are responsible for every piece of content, from graphic design and layout to photography and text. Beyond the fleeting scope of social media, students will create an artifact that captures their experience at NAI. Completed yearbooks are distributed to students who paid for them upon completion in the spring.</p>		

<b>Course Title:</b>	Essentials English 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0421	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Essential English 3 focuses on American Literature by connecting students with the literature and the culture of America as a whole. Students will enhance their reading comprehension skills through reading, comparisons, and reflections. Students will reinforce fundamental writing techniques, including grammar, organization, and content. Through literary study, research, writing, grammar, and vocabulary development, students will become proficient readers and writers, preparing them for all future endeavors.</p>		

## English Language Arts

<b>Course Title:</b>	English 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0422	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 92% in Essentials English 2 OR</li> <li>• Minimum of 60% in English 2</li> </ul>		
	<p>English 3 focuses on American Literature and studies it in a way that allows students to see how it connects to themselves, as well as to American culture as a whole. Students will enhance their reading comprehension skills through close-reading, comparisons, and reflections. Additionally, a key component of the course is the reinforcement of fundamental writing techniques, including grammar, organization, and content. Through literary study, writing, grammar, and vocabulary development, students will become proficient readers and writers, fully prepared for whatever they decide to do upon graduation.</p>		

<b>Course Title:</b>	Academic English 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0423	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 70% in Academic English 2 OR</li> <li>• Minimum of 95% in English 2</li> </ul>		
	<p>Academic English 3 is a college and career preparatory course where juniors will study American literature and non-fiction works. Students will analyze the literature in conjunction with the social, historical, and cultural forces, which influence writers, as well as use and develop their reading, listening, speaking, and composition skills. Students will consistently work on improving formal writing skills through smaller writing responses as well as completing large, textual evidence essays throughout the units. In this course, students will have prominent SAT vocabulary words each 9 weeks, and at the end of the course, each student will have developed their college essay or resume depending on their future plans.</p>		

<b>Course Title:</b>	Honors English 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0424	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 85% in Honors English 2 OR</li> <li>• Minimum of 95% in Academic English 2</li> </ul>		
	<p>Honors English 3 is a year-long course that follows the progression of American literature from its inception to modern times. It focuses on each literary time period through a variety of novels, poems, short stories, and plays. Students will participate in regular reading quizzes, Socratic Seminars, group projects, presentations, research writing, and literary analysis on a more challenging and advanced level. The course will focus specifically on formal writing at a college level in preparation for future courses. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

## English Language Arts

<b>Course Title:</b>	AP English 3: Language and Composition	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0425	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 90% in Honors English 2 OR</li> <li>• Minimum of 97% in Academic English 2</li> </ul>		
	<p>AP3 is a college-level course that requires students to bring a high level of industry overall and also a strong competency in expository composition across all domains. Students should expect an increased demand and rigor applied to critical reading. The course will focus heavily on the three writing modes of Rhetorical Analysis, Argumentation, and Synthesis. Analysis will focus heavily on timed (in-class) writing. Students are expected (but not required) to take the College Board AP Language and Composition test in May. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

<b>Course Title:</b>	Essentials English 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0431	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>Essential English 4 focuses on literature that highlights varied perspectives by connecting students with the literature and various cultures and the world. Students will enhance their reading comprehension skills through reading, comparisons, and reflections. Students will reinforce fundamental writing techniques, including grammar, organization, and content. Through literary study, research, writing, grammar, and vocabulary development, students will become proficient readers and writers, preparing them for all future endeavors.</p>		

<b>Course Title:</b>	English 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0432	<b>STEM</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 92% in Essential English 3 OR</li> <li>• Minimum of 60% in English 3</li> </ul>		
	<p>English 4 focuses on literature that highlights diverse perspectives and cultures throughout the world. Students will study literature in a way that connects them historically and personally in order to enhance them academically and eventually, professionally. Students will improve their research and writing skills through a variety of different writing modes that reinforce grammar, sentence structure, and style.</p>		



## English Language Arts

<b>Course Title:</b>	Academic English 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0433	<b>STEM</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 70% in Academic English 3 OR</li> <li>• Minimum of 95% in English 3</li> </ul>		
	<p>Academic English 4 is a challenging, college-preparatory course where seniors will study world literary and non-fiction works. Students will analyze the literature in conjunction with the social, historical, and cultural forces which influence writers, as well as use and develop their reading, listening, speaking, and composition skills. Added emphasis is placed on expository, persuasive, and analytical writing with a focus on critical thinking skills, mechanics, style, and voice. Students will complete an in-depth term paper that includes documented research as a culmination of the course.</p>		

<b>Course Title:</b>	Honors English 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0434	<b>STEM</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 85% in Honors English 3 OR</li> <li>• Minimum of 95% in Academic English 3</li> </ul>		
	<p>This year-long senior course is designed for distinguished language arts students interested in fortifying their skills in preparation for further, extensive study at the college-level. With a focus on world literature, writers are critically analyzed in relation to their cultural and historical influences. Intense and higher levels of outside readings will serve as components of this course. Composition assignments build sequentially upon the writing process as students work to advance their research and expository writing skills, including revision for elevated style and tone. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

<b>Course Title:</b>	AP English 4: Literature and Composition (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0435	<b>STEM</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 88% in AP English 3 OR</li> <li>• Minimum of 93% in Honors English 3</li> </ul>		
	<p>Advanced Placement English 4 is a college-level course for students with superior reading and writing skills as well as an interest in a challenging, fast-paced environment. Students will read a variety of whole texts and engage in discussion and analysis. Seventy-five percent of the course grade entails timed, in-class essay writing; such emphasis on writing is reinforced with intense studies of language, structure, the nature of literary analysis, and literary theory. The course also explores poetry, with a focus on poetic language, devices, form, and function. Students are expected (but not required) to take the College Board AP Literature and Composition test in May. Students who enroll in this course will be required to complete assigned summer reading prior to the start of the school year.</p>		

## English Language Arts

<b>Course Title:</b>	Acting: Taking the Stage	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0461	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course calls for actors interested in improvisation, scene work, and the analysis of award-winning whole texts. Discussion and analysis will focus on going beyond obvious textual inferences by analyzing “what is said between the lines” and interpreting that on the stage. Emphasis will be placed on the role nonverbal communication plays in interpretation. Ultimately, this course will help to provide each student with skills for speaking and presenting in public forums.</p>		

<b>Course Title:</b>	Broadcasting	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0463	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Situated in the NATV Studio, this full-year course places students at the controls of the NASH Morning Show. The hands-on learning in this course attracts students who have an interest in communications or film/video production, as well as students who simply wish to spend a year producing a daily broadcast for the student body. This course is ideal for students who either prefer to work behind the scenes with technical equipment or in front of the camera as news anchors. Typically, there is ample time in this course for students to produce their own videos when they are not assigned to a role in the morning show broadcast.</p>		

<b>Course Title:</b>	Contemporary Novels	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0464	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Contemporary Novels is a semester-long elective course that models a “book club” as a graded class. This class is for students who enjoy reading modern novels in different genres such as realistic fiction, romance, horror, thriller, fantasy, and science fiction. Students will vote on novel selections, and while Actively Learn and libraries may have the novels available, students may be responsible for securing a copy of the novel on their own. Class activities will include large and small group discussions, creative writing opportunities, film to novel comparisons, projects, and movies. This class will foster a love for reading and the promotion of life-long readers</p>		

## English Language Arts

<b>Course Title:</b>	Creative Writing 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0465	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This elective course is open to all North Allegheny Senior High students who are interested in developing, or continuing to develop, their creative voice through language. Students will have the opportunity to explore a variety of writing, including different types of poetry and short stories, experiment with new topics, genres, and media of interest, and become part of a writing community through activities and workshops. Students will hone their writing skills in the implementation of theme, tone, conflict, setting, imagery, and point of view through poetry and fiction.</p>		

<b>Course Title:</b>	Film and TV Production 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0473	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Situated in the NATV Studio, this hands-on course introduces students to cinematography, digital editing, and multi-camera news broadcasting. Using professional equipment and software, students learn to produce both creative and journalistic pieces. No prior experience with filmmaking is necessary. Successful students are encouraged to continue their involvement in the program by taking Film and TV Production 2 and/or Broadcasting.</p>		

<b>Course Title:</b>	Film and TV Production 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0474	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Film and TV Production 1</li> <li>OR</li> <li>Special approval by teacher</li> </ul>		
	<p>Situated in the NATV Studio, this course expands upon the principles and techniques taught in Film and TV Production 1. Students in this course learn to improve their storyboarding, scripting, and shot composition skills using professional video and audio equipment. This course challenges students to produce longer videos than the ones they produced in Film and TV Production 1, and assignments include both creative and documentary films. Students who are already proficient with video production and who have not taken Film and TV Production 1 may see the teacher to request placement in Film and TV Production 2.</p>		

## English Language Arts

<b>Course Title:</b>	Film and TV Production 3	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0475	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Film and TV Production 2</li> </ul>		
	<p>Situated in the NATV Studio, this course enables advanced students to fully explore their interest in video production. Emphasis is placed upon fine-tuning the craft of filmmaking, with special attention to careful pre-production, advanced shot composition, and post-production. The principles learned in Film and TV Production 1 and 2 serve as the foundation to the creative and independent work done in this course. Top student productions will be submitted to local and national competitions.</p>		

<b>Course Title:</b>	Film Studies (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0476	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Students will examine how the medium artistically represents history and how scholarly criticism elevates landmark films to the status of literary art. The course will focus on film as a mechanism for reflecting two angles: how art reflects life, and how life can reflect art. Students will also engage in critical readings and response writing. As some of the films are R-rated, permission slips will be required for all enrolled students</p>		

<b>Course Title:</b>	Honors Argument (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0469	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course introduces the fundamentals of argumentation in both theory and practice. Honors Argument has a CHS (College in High School) option. There will be a minimum of three performance based debates and a moderate research component. Students will practice eloquence and become sensitive to the intricacies of debate and discourse.</p>		

## English Language Arts

<b>Course Title:</b>	Honors Journalism 11 (CHS), 12	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0471, 0472	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Students in this workshop course are placed at the controls of the NASH student media site, The Uproar. The principles and ethics of online journalism serve as ongoing topics of study, while students write, revise, and publish articles ranging from news and opinions to entertainment, sports, and special interest topics. Journalistic photography and social media are also key components of the course, and students are encouraged to incorporate new media platforms such as podcasting into their work. The desire and ability to meet regular deadlines is an essential aspect of this course. Exemplary student productions are submitted for local and national recognition in the field of student journalism.</p>		

<b>Course Title:</b>	Speech (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0477	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This is a public speaking course where the focus is on individual growth as a presenter. Academic success centers on the individual's ability to take chances and learn through experience. Each speech topic will be generated by the individual, and self-expression and creativity are highly encouraged. Ultimately, every student should leave at the end of the semester competent in managing the nonverbal aspects of presentation and experienced in developing written speeches across a variety of domains.</p>		

<b>Course Title:</b>	Yearbook	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0478, 0479	<b>STEM</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>In this workshop course, students are expected to plan, write, organize, and design the high school yearbook, Safari, under the supervision of the yearbook adviser. Students learn basic principles of yearbook production and develop skills that include writing copy, captions and headlines; digital photography; desktop publishing and using appropriate technology tools for media production. Due to the workload and multiple production deadlines, after-school meetings are sometimes required.</p>		

## English Language Arts

<b>Course Title:</b>	English as a Second Language	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0489	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>English as a Second Language is an academic discipline that is designed to teach English Language Learners academic language and social skills, as well as cultural aspects of the English language necessary to succeed in the academic environment. English as a Second Language involves teaching reading, writing, speaking, and listening at appropriate developmental and proficiency levels with little or no use of the native language. English as a Second Language course replaces a student's required participation in English and is aligned with PA Academic Standards. Students must meet District criteria and undergo an evaluation to determine eligibility for the program. Based on the Basic Education Circular of July 2001, Non-English-speaking students receive 10 to 15 hours of ESL instruction per week, Beginning Level students receive 10 hours per week, Intermediate Level students receive 5 to 7 ½ hours per week, and Advanced Level students receive 5 hours per week.</p>		

<b>Course Title:</b>	Applied ELA 9, 10, 11, 12, 12+	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0492 (9) 0493 (10) 0494 (11) 0495 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Placement in life skills support and autistic support and previously qualified for PASA</li> </ul>		
	<p>Applied English is a course for students who require direct instruction in the area of functional written language as determined by the IEP team. This course utilizes a curriculum that is aligned with the alternate standards.</p>		

<b>Course Title:</b>	English 9, 10, 11, 12	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0496 (9) 0497 (10) 0498 (11) 0499 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>English is a course for students who require direct instruction in the area of written language as determined by the IEP team. This course utilizes the respective English curriculum with adaptations and modifications based on individualized student needs.</p>		

## **Family and Consumer Science**

<u><b>CREDIT</b></u>	<u><b>COURSE TITLE</b></u>	<u><b>COURSE #</b></u>	<u><b>OPEN TO GRADES</b></u>
0.5	Adventures in Food	0501	9,10
0.5	Introduction to Child Development	0520	9,10
0.5	Fashion & Design	0510	9,10
0.5	International Foods	0502	9,10
0.5	Introduction to Sports Nutrition	0503	9,10
0.5	The Real World	0581	11,12
0.5	Foods Americana	0550	11,12
0.5	Foods for You	0551	11,12
0.5	Sports Nutrition	0552	11,12
0.5	Interior Design	0561	11,12
0.5	Child Psychology (CHS)	0570	11,12
0.5	Fashion Art & Merchandising	0560	11,12
0.5	Preschool Practicum	0571	12

**(CHS) Indicates College in High School Course**

## Family and Consumer Science

<b>Course Title:</b>	Adventures in Food	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0501	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	Develop an understanding of food and basic nutrition, kitchen safety and sanitation, and build upon culinary skills while working on more challenging recipes. Examine and incorporate social food trends including food in the social media world and social food issues, such as food waste, sustainability, and farm to table.		

<b>Course Title:</b>	Introduction to Child Development	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0520	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	Become a more confident and attentive caregiver by learning the skills needed to encourage healthy, happy babies and supportive, loving families. Investigate a variety of topics related to infants and children with opportunities for hands-on experiences, including the Real Care baby simulator. Learn about the whole child, including physical, social, emotional, intellectual development, health and safety, and caring for children.		

<b>Course Title:</b>	Fashion & Design	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0510	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	Fashion and Design is an introduction to the creative world of design. Students will explore fashion design from a designer's perspective, working through basic fashion principles to creating and sketching pieces for a clothing line. Students will construct garments, working on multiple projects using sewing machines. Other aspects of design in our lives will be explored through individual projects that focus on student interests.		

<b>Course Title:</b>	International Foods	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0502	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	Prepare foods from around the world as you explore international customs and cuisines. Discover the ingredients, preparation techniques, and tools used in authentic dishes during weekly labs while collaborating with classmates.		



## Family and Consumer Science

<b>Course Title:</b>	Introduction to Sports Nutrition	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0503	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Improve your performance by learning the basics of nutrient use in exercise and how to apply nutrition strategies to meet your wellness goals. Examine the relationship between physical activity, proper nutrition, sports performance, and overall health. Prepare healthy foods, modify recipes, and analyze personal eating habits.</p>		

<b>Course Title:</b>	The Real World	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0581	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Writing a check, paying taxes, how to ace the interview, managing stress, and creating easy, healthy meals are some of the topics covered in this course on “how to adult.” Learn skills needed for the real world and life after graduation with a focus on personal finance, career preparation, organization, and overall wellness.</p>		

<b>Course Title:</b>	Foods Americana	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0550	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Discover interesting and iconic foods from different regions around the USA. Investigate the cultural backgrounds that influence cuisine, as well as college and career opportunities within those regions. Use various kitchen appliances, meal planning strategies, and practice food safety and sanitation as you cook throughout the semester.</p>		

<b>Course Title:</b>	Foods For You	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0551	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Practice skills related to health, nutrition, and kitchen management prior to entering adulthood. Adopt strategies to make smart food choices and how to respond to health situations that may arise in the future. This is a hands-on “adulting in the kitchen” class to cook and try new recipes throughout the semester.</p>		

## Family and Consumer Science

<b>Course Title:</b>	Sports Nutrition	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0552	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Passionate about playing sports? Student athletes will gain knowledge to fuel up properly for high-performance by maximizing nutrient intake based on sport-specific needs. Increasing muscle mass, reducing body fat, eating on the road, timing of eating, and dietary supplements will be covered, as well as special concerns for the student athlete including eating disorders, steroid use, and alcohol abuse. Prepare and sample lightened versions of favorite meals that help maintain their commitments to wellness.</p>		

<b>Course Title:</b>	Interior Design	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0561	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Immerse yourself in the field of interior design as you practice creating designs that integrate function and beauty, including a capstone room makeover project. History of housing and architecture, universal design, and sustainability in the built environment will be investigated. Students will apply their learning in self directed hands-on projects throughout the class.</p>		

<b>Course Title:</b>	Child Psychology (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0570	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Early childhood is a critical period for human development. Study developmental psychology and gain insight into positive and negative influences on human development from conception to age 3. Explore the impact we have on the health, safety, and overall development of a child. Careers working with children and families will be discussed throughout the class.</p>		

## Family and Consumer Science

<b>Course Title:</b>	Fashion Art & Merchandising	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0560	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Study the ever changing world of the fashion industry while applying the principles of art and design as you create student directed hands-on projects using textiles. Discover the inner workings of the fashion industry and how our clothes are made, from fibers to wearable designs. Learn about the how and why of clothing, the fashion cycle and fashion throughout modern history, and contemporary issues in the industry. Career opportunities will be investigated.</p>		

<b>Course Title:</b>	Preschool Practicum	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0571	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Interact with preschoolers throughout this semester course which includes a preschool lab that meets 3 days a week. Explore and apply advanced child development concepts and theories while planning and leading classroom activities that promote child development for the preschooler, including lessons in art, music, wellness, science, literacy, math and more. Seniors who choose this course need to have an interest in working directly with children and striving to build positive relationships with them.</p>		

## Health and Physical Education

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
0.5	Wellness for Life	0605 / 0606	9,10
0.5	Health & Physical Education	0601 / 0602	9,10
0.5	Adaptive Physical Education	0631	9,10,11,12
1.0	Advanced Health & Physical Education	0603	9,10
0.5	Health & Physical Education	0611 / 0612	11,12
0.5	Unified Health & Physical Education - Sophomore Year	0632	10
0.5	Unified Health & Physical Education - Senior Year	0633	12

## Health and Physical Education

<b>Course Title:</b>	Wellness for Life	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0606 (Full Year/Part Time) 0605 (Semester/Full Time)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This is the preferred Wellness course for students. WELLNESS FOR LIFE No. 8410 Full Year/Part Time Grade 9 or 10 Credit .5 may be scheduled in lieu of #8409 when necessitated by certain scheduling scenarios. Wellness for Life is designed to provide students with an opportunity to learn and practice skills revolving around the physical, mental/emotional, and social aspects of Wellness. An emphasis is placed on the importance of practicing health skills including; analyzing influences, accessing resources, interpersonal communication, decision making, goal setting, practicing health enhancing behaviors, and advocacy skills that will lead to a higher quality of life. Course information is presented in a practical manner incorporating current health trends and concerns. Content areas will include: Personality, Stress, Mental Health, Relationships (bullying prevention), Nutrition, Non-infectious &amp; Infectious Disease (A.I.D.S. and other STDs), Human Sexuality, Substance Abuse, Personal Safety and CPR.</p>		

<b>Course Title:</b>	Health & Physical Education	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0601 (Full Year/Part Time) 0602 (Semester/Full Time)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>The goal of Physical Education is to facilitate students in improving their quality of life through promotion of life-long, health-enhancing physical activity. Physical activity is not only a leisure time luxury – it is an essential component of a healthy lifestyle for all individuals. At NAI, students will learn why regular planned physical activity is important, how to develop a personal plan for being physically active, and concepts necessary for successful participation in regular physical activity. The course will emphasize each student working throughout the course to reach their personal fitness and activity goals while integrating health information relating to; nutrition, mental health, analyzing influences, goal setting, interpersonal communication,. The curriculum focus is on lifetime fitness activities including; Aerobic Fitness: running technique and hiking - Biking &amp; Group &amp; Individual Fitness - Strength Training - Adventure Education: teambuilding, adventure racing, &amp; outdoor skills - Pickleball</p>		

<b>Course Title:</b>	Adaptive Physical Education	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0631	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Adaptive Physical Education is similar to regular physical education classes except that class size is smaller to permit concentrated development in coordination, strength, flexibility, and improved physical fitness. Skills for individual and team activities will be adjusted to individual needs.</p>		

## Health and Physical Education

<b>Course Title:</b>	Advanced Health & Physical Education	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0603	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This physical education class is for those students who want to make a serious commitment to their physical well-being. Advanced Physical Education may be scheduled in place of Course 0601/0602 for the 9 th and 10th grades only. The class emphasizes cardiorespiratory efficiency, muscular strength, and muscular endurance. It is designed to enhance flexibility, help students understand body composition, develop positive attitudes, and responsible habits. The course will cover the regular physical education curriculum and will include additional time allotted to workouts focused on improving individual fitness levels.</p>		

<b>Course Title:</b>	Health & Physical Education	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0611 / 0612	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Physical Education at the Senior High School involves both fitness and lifetime activities. Students will engage in activities that promote fitness, increase participation, develop knowledge of skills and fitness concepts, and appreciate the benefits of being active. Junior year curriculum is oriented toward fitness activities and concepts. Senior year curriculum is focused on introducing students to activities they can do for a lifetime. Students will demonstrate the best and safest practices recommended for participation in recreational and fitness activities.</p>		

<b>Course Title:</b>	Unified Health & Physical Education - Sophomore	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0632	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion freshman year and teacher recommendation.</li> </ul>		
	<p>Unified Physical Education is an elective course for sophomores that offers a unique opportunity for students of varying ability levels and backgrounds to collaborate and serve as both, a peer mentor and learner. For interested students, this elective is offered in place of the regular physical education course. The focus of this course is on the physical, intellectual, and social growth of all participants. Students applying for this course must be in their freshman year with an interest in mentoring students. All students wishing to mentor are expected to be enthusiastic, positive role models, and student leaders. If you have an interest in helping others, special needs or physical/occupational therapy, this class may be a great fit for you. All students in this class will work together to meet all the course requirements and will follow a variation of the NAI PE curriculum. Students will have additional assignments in the form of journals, reflections and collaborative lessons. Class enrollment is limited. Recommendation from your school counselor, plus two additional teachers and an in-person interview upon application are required to be considered for this course. Enrollment within this course is subject to class size and staffing.</p>		

## Health and Physical Education

<b>Course Title:</b>	Unified Health & Physical Education - Senior	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0633	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion of junior year and teacher recommendation.</li> </ul>		
	<p>Unified Physical Education is an elective course for seniors that offers a unique opportunity for students of varying ability levels and backgrounds to collaborate and serve as both, a peer mentor and learner. For interested students, this elective is offered in place of the regular physical education course. The focus of this course is on the physical, intellectual, and social growth of all participants. Students applying for this course must be in their junior year with an interest in mentoring students. All students wishing to mentor are expected to be enthusiastic, positive role models, and student leaders. If you have an interest in helping others, special needs or physical/occupational therapy, this class may be a great fit for you. All students in this class will work together to meet all the course requirements and will follow a variation of the NASH PE curriculum. Students will have additional assignments in the form of journals, reflections and collaborative lessons. Class enrollment is limited. Recommendation from your school counselor, plus two additional teachers and an in-person interview upon application are required to be considered for this course. Enrollment within this course is subject to class size and staffing.</p>		

# Mathematics

## North Allegheny School District Mathematics Program

Pathway	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
<b>M4 PLUS</b>	5TH Grade Elementary Math	Advanced Math 6	Advanced Pre-Algebra	Advanced Algebra 1	Honors Geometry	Honors Algebra 2	*AP Precalculus with Trigonometry  * Honors Precalculus with Trigonometry	* AP Calculus BC * AP Calculus AB * Honors Calculus * Math Electives	
<b>M4</b>			Advanced Math 6	Advanced Pre-Algebra	Advanced Algebra 1	Honors Geometry	Honors Algebra 2	*AP Precalculus with Trigonometry  * Honors Precalculus with Trigonometry	*AP Calculus BC *AP Calculus AB *Honors Calculus *Math Electives
<b>M3</b>			Academic Math 6	Academic Pre-Algebra	Academic Algebra 1	Academic Geometry	Academic Algebra 2	Academic Algebra 3 with Trigonometry  Academic Algebra 3	*Academic Calculus  * Academic Trig w/ Functions  *Honors Pre-Calculus w/ Trig  *Acad Algebra 3 w/ Trig  *Acad Trig w/ Functions
<b>M3</b>						Academic Algebra 1	Academic Geometry	Academic Algebra 2	*Honors Pre-Calculus w/ Trig  *Acad Algebra 3 w/ Trig  *Acad Trig w/ Functions  *Math Elective
<b>M2</b>			Math 6	Math 7	Math 8	Algebra 1	Geometry	Algebra 2 and Topics	*College Algebra  *Math Elective

**MATHEMATICS ELECTIVES INCLUDE:** Honors Computer Programming A (C++), Academic Computer Science A (PYTHON), Honors Computer Programming B (C++), Academic Computer Science B (PYTHON), AP Computer Science (JAVA), AP Computer Science Principles, Honors Database Programming (SQL), AP Statistics, Honors Probability and Statistics, Honors Linear Algebra, and Beginning Computer Applications.

**LEGEND:** (M4 PLUS) = Advanced Academic, (M4) = Advanced at Grade Level, (M3) = at Grade Level, and (M2) = Concepts and Skills at Grade Level

**IMPORTANT NOTE:** BASED ON A STUDENT'S PERFORMANCE, THE CURRENT MATH TEACHER MAY APPROVE THAT THE STUDENT MOVE TO A DIFFERENT PATHWAY.



# Mathematics

## North Allegheny School District Computer Science Program

Pathway	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
<b>M4 PLUS</b>	*Honors Algebra 2 *Honors Geometry	*Honors Computer Programming A (C++)  *Honors Computer Programming B (C++)  *AP Computer Science Principles	*AP Computer Science Principles  *Honors Computer Programming A (C++)  *Honors Computer Programming B (C++)	*AP Computer Science (JAVA)  *Honors Database Programming (SQL)	*Math Elective  *AP Computer Science (JAVA)
<b>M4</b>	*Advanced Algebra 1	*Honors Computer Programming A (C++)  *Honors Computer Programming B (C++)  *AP Computer Science Principles	*AP Computer Science Principles  *Honors Computer Programming A (C++)  *Honors Computer Programming B (C++)	*AP Computer Science (JAVA)  *Honors Database Programming (SQL)	*Math Elective  *AP Computer Science (JAVA)
<b>M3</b>	*Academic Algebra 1	*Academic Computer Science A (PYTHON)  *Academic Computer Science B (PYTHON)  *Beginning Computer Applications	*Beginning Computer Applications  *Academic Computer Science A (PYTHON)  *Academic computer Science B (PYTHON)	*Academic Computer Science A (PYTHON)  *Academic Computer Science B (PYTHON)  Note: Academic Computer Science A (PYTHON) and Academic Computer Science B (PYTHON) are available for students who have not previously taken these courses at NAI.	*Math Elective

**LEGEND:** (M4 PLUS) = Advanced Academic, (M4) = Advanced at Grade Level, (M3) = at Grade Level

**IMPORTANT NOTE:** BASED ON A STUDENT'S PERFORMANCE, THE CURRENT MATH TEACHER MAY APPROVE THAT THE STUDENT MOVE TO A DIFFERENT PATHWAY.

# Mathematics

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Algebra 1 (IMPACT) *	0701	9
1.0	Algebra 1	0702	9
1.0	Academic Algebra 1	0703	9
1.0	Honors Geometry	0705	9,10
1.0	Academic Geometry	0704	9,10
1.0	Geometry (IMPACT) *	0711	10
1.0	Geometry	0712	10
1.0	Honors Algebra 2	0706	9, 10
1.0	Academic Algebra 2	0713	9,10,11,12
1.0	Algebra 2 and Topics	0721	11,12
1.0	Academic Algebra 3	0722	11,12
1.0	Academic Algebra 3 with Trigonometry	0723	10,11,12
1.0	Honors Precalculus with Trigonometry (CHS)	0714	9,10,11,12
1.0	AP Precalculus with Trigonometry	0715	9,10,11,12
1.0	Honors Probability and Statistics (CHS)	0752	11,12
1.0	AP Statistics	0751	10,11,12
1.0	College Algebra	0731	12
1.0	Academic Trigonometry with Functions	0732	12
1.0	Academic Calculus	0733	11,12
1.0	Honors Calculus (CHS)	0734	10,11,12
1.0	AP Calculus AB	0735	9,10,11,12
1.5	AP Calculus BC (CHS)	0736	9,10,11,12

\* These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.

(CHS) Indicates College in High School Course

# Mathematics

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Honors Linear Algebra (CHS)	0753	11,12
0.5	Honors Computer Programming A (C++)	0747	9,10
0.5	Academic Computer Science A (Python)	0741	9,10,11,12
0.5	Honors Computer Programming B (C++)	0748	9,10
0.5	Academic Computer Science B (Python)	0742	9,10,11,12
1.0	AP Computer Science Principles	0744	9,10
1.0	AP Computer Science (CHS)	0743	10,11,12
0.5	Honors Database Programming (SQL)	0745	11,12
0.5	Beginning Computer Applications	0746	9,10
1.0	Applied Math	0792, 0793, 0794, 0795	9, 10, 11, 12, 12+
1.0	Consumer Math	0796, 0797	11, 12, 12+
1.0	Algebra I A	0760	9
1.0	Algebra I B	0761	10

**(CHS) Indicates College in High School Course**

## Mathematics

<b>Course Title:</b>	Algebra 1 (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0701	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> <li>Minimum of 60% in Math 8 (8M2)</li> </ul>		
	<p>This is the first year of the Algebra 1 Mathematics sequence. Students enrolled in this course will utilize the Algebra 1 curriculum, which addresses all the content outlined in the PA Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction lessons. This program exposes students to a solid foundation in Algebra 1.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The purpose of this course is to meet the needs of students requiring more assistance. The content of Algebra 1 is organized around families of functions, with emphasis on linear, exponential, polynomial, quadratic, radical, and rational functions. As students learn about each family of functions, they will learn to represent them in multiple ways. The student will also learn to model real-life situations using functions to solve problems arising from those situations. All students will take the Algebra 1 Keystone Exam at the end of this course.</p>		

<b>Course Title:</b>	Algebra 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0702	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Math 8 (8M2)</li> </ul>		
	<p>This is the first year of the Algebra 1 Mathematics sequence. Students enrolled in this course will utilize the Algebra 1 curriculum, which addresses all the content outlined in the PA Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction lessons. This program exposes students to a solid foundation in Algebra 1.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The purpose of this course is to meet the needs of students requiring more assistance. The content of Algebra 1 is organized around families of functions, with emphasis on linear, exponential, polynomial, quadratic, radical, and rational functions. As students learn about each family of functions, they will learn to represent them in multiple ways. The student will also learn to model real-life situations using functions to solve problems arising from those situations. All students will take the Algebra 1 Keystone Exam at the end of this course.</p>		

## Mathematics

<b>Course Title:</b>	Academic Algebra 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0703	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 90% in Math 8 (8M2)</li> </ul> <p>NOTE: Students who do not meet the minimum of 70% in Academic Algebra 1 (prior to grade 9) will be approved to repeat Academic Algebra 1 in 9th grade.</p>		
	<p>Academic Algebra 1 is the first formally structured course of the Academic sequence. The content is organized around the families of functions, with special emphasis on linear and quadratic functions, along with representing functions in multiple ways through inquiry-based learning in real-world situations. In addition to its Algebra content, the course offers lessons on probability and data analysis as well as numerous examples and exercises involving mathematical connections to Geometry. Algebra 1 provides instruction and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. All students will take the Algebra 1 Keystone Exam at the end of the course.</p>		

<b>Course Title:</b>	Honors Geometry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0705	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Advanced Algebra 1 (8M4 )</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>Minimum of 95% in Academic Algebra 1 (includes 8M3)</li> </ul>		
	<p>This is the second year of the Honors Mathematics sequence. Honors Geometry is a rigorous course for students who have completed Advanced Algebra 1 in grades 6, 7, or 8. In this course, students will develop reasoning and problem-solving skills in the areas of congruence, similarity, properties of lines, properties of triangles, properties of quadrilaterals, and properties of circles. The course will also include work with transformations, perimeter, area, circumference, surface area, and volume to solve real-world problems. In addition to the Geometry content, this course includes numerous examples and exercises involving Algebra and trigonometry. Honors Geometry provides inquiry-based learning and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. Technology support will be used for both learning Geometry and for preparing for standardized tests.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

## Mathematics

<b>Course Title:</b>	Academic Geometry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0704	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 70% in Academic Algebra 1 (8M3) OR</li> <li>• Minimum of 60% in Academic Algebra 1 OR</li> <li>• Minimum of 90% in Algebra 1 OR</li> <li>• Minimum of 90% in Algebra 1 (IMPACT)</li> </ul> <p>NOTE: Students who do not meet the minimum of 70% in Academic Algebra 1 (8M3) and DO NOT score Proficient or Advanced on the Keystone Algebra 1 Assessment will be approved to repeat Academic Algebra 1 in 9th grade.</p>		
	<p>This is the second year of the Academic Mathematics sequence. In this course, students will develop reasoning and problem-solving skills in the areas of congruence, similarity, properties of lines, properties of triangles, properties of quadrilaterals, and properties of circles. The course will also include work with perimeter, area, circumference, surface area, and volume to solve real-world problems. In addition to the Geometry content, this course includes numerous examples and exercises involving Algebra and trigonometry. Academic Geometry provides inquiry-based learning and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. Technology support will be used for both learning Geometry and for preparing for standardized tests.</p>		

<b>Course Title:</b>	Geometry (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0711	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> <li>• Minimum of 60% in Algebra 1 (IMPACT) or Algebra 1</li> </ul>		
	<p>This is the second year of the Algebra 1/Geometry/Algebra 2 sequence. Students enrolled in this course will be utilizing the Geometry curriculum which addresses the content outlined in the PA Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction lessons. This program exposes students to an understanding of geometric and trigonometric concepts.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The purpose of this course is to meet the needs of students requiring more assistance. The Geometry strand of this course includes topics on parallel and perpendicular lines, triangles, quadrilaterals, similarity, polygons, transformations, area, surface area, and volume. The Trigonometry strand will cover square roots, special right triangle relationships, trigonometric ratios, and circles.</p>		

## Mathematics

<b>Course Title:</b>	Geometry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0712	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Algebra 1</li> </ul>		
	<p>This is the second year of the Algebra 1/Geometry/Algebra 2 sequence. Students enrolled in this course will be utilizing the Geometry curriculum which addresses the content outlined in the PA Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction lessons. This program exposes students to an understanding of geometric and trigonometric concepts.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The purpose of this course is to meet the needs of students requiring more assistance. The Geometry strand of this course includes topics on parallel and perpendicular lines, triangles, quadrilaterals, similarity, polygons, transformations, area, surface area, and volume. The Trigonometry strand will cover square roots, special right triangle relationships, trigonometric ratios, and circles.</p>		

<b>Course Title:</b>	Honors Algebra 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0706	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Honors Geometry OR</li> <li>Minimum of 95% in Academic Geometry</li> </ul>		
	<p>This is the third year of the Honors Mathematics sequence. Honors Algebra 2 is a rigorous course for students who had Honors Geometry in grades 7, 8, or 9. The content of this course is organized around families of functions, including linear, quadratic, exponential, logarithmic, radical, and rational functions. Students will also learn to model real-world situations using functions. In addition to its Algebra content, Honors Algebra 2 includes topics on probability, data analysis, Geometry, and Trigonometry. Honors Algebra 2 provides instruction and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. Technology support will be used for both learning Algebra 2 and for preparing for standardized tests.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

## Mathematics

<b>Course Title:</b>	Academic Algebra 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0713	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 60% Academic Geometry OR</li> <li>• Minimum of 90% in Geometry OR</li> <li>• Minimum of 90% in Geometry (IMPACT)</li> </ul> <p>NOTE: Students who do not meet the minimum of 80% in Honors Geometry will be approved for Academic Algebra 2.</p>		
	<p>This is the third year of the Academic Mathematics sequence. The content of this course is organized around families of functions, including linear, quadratic, exponential, logarithmic, radical, and rational functions. Students will also learn to model real-world situations using functions. In addition to its Algebra content, Academic Algebra 2 includes topics on probability, data analysis, Geometry, and Trigonometry. Academic Algebra 2 provides instruction and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. Technology support will be used for both learning Algebra 2 and for preparing for standardized tests.</p>		

<b>Course Title:</b>	Algebra 2 and Topics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0721	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 60% in Geometry (IMPACT) or Geometry</li> </ul>		
	<p>This is the third course of the Algebra 1/Geometry/Algebra 2 Mathematics sequence. Students enrolled in this course will utilize the Algebra 2 curriculum which addresses all the content outlined in the PA Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction. This program exposes students to a solid foundation of Algebra 2.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. The purpose of this course is to meet the needs of students requiring more assistance. The content of Algebra 2 is organized around families of functions, with emphasis on expressions, equations/inequalities, graphs, matrices, and sequences and series. The student will also learn to model real-life situations using functions to solve problems arising from those situations.</p>		



## Mathematics

<b>Course Title:</b>	Academic Algebra 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0722	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Students who do not meet the minimum of 80% in Academic Algebra 2</li> </ul>		
	<p>This is the fourth course of the Academic Mathematics sequence. Major emphasis includes the topics of modeling problem situations, family of functions, including linear, absolute value, quadratic, polynomial, exponential, logarithmic, radical, and rational functions. Students will also learn to model real-world situations using functions and transform the graphs of functions. In addition to its algebra content, Academic Algebra 3 includes topics on probability and counting and sequences and series. Academic Algebra 3 provides inquiry-based instruction and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response.</p>		

<b>Course Title:</b>	Academic Algebra 3 with Trigonometry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0723	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Academic Algebra 2 OR</li> <li>Students who do not meet the minimum of 80% in Honors Algebra 2 OR</li> <li>Between 90% and 94% in Academic Algebra 3</li> </ul>		
	<p>This is the fourth year of the Academic Mathematics sequence. Major emphasis includes the topics of modeling problem situations, family of functions, including linear, absolute value, quadratic, polynomial, exponential, logarithmic, radical, rational, and circular and trigonometric functions. Students will also learn to model real-world situations using functions and transform the graphs of functions. Academic Algebra 3 with Trigonometry provides inquiry-based learning and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. Completion of the course will provide a smooth transition to Academic Calculus.</p>		

## Mathematics

<b>Course Title:</b>	Honors Precalculus with Trigonometry (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0714	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Algebra 2 OR</li> <li>• Minimum of 95% in Academic Algebra 2 OR</li> <li>• Minimum of 95% Academic Algebra 3</li> </ul>		
	<p>This is the fourth year of the Honors Mathematics sequence. Honors Precalculus with Trigonometry is a rigorous course for the accelerated student. It requires a strong foundation in Algebra and Geometry. Major emphasis is placed on algebraic concepts and analysis of curves, functions, and graphing techniques. This course also contains a study of Trigonometry from the circular and right triangle perspective. The analysis of conic sections and other geometric curves from a coordinate point of view are also studied. Honors Precalculus with Trigonometry provides inquiry-based learning and practice on standardized test questions in a variety of formats including multiple-choice, short response, and extended response. This is an Honors course which leads to Honors Calculus or AP Calculus. Students who have trouble in this course have Academic Calculus as an option for a fifth year of mathematics. This course is required as a prerequisite for Calculus.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

<b>Course Title:</b>	AP Precalculus with Trigonometry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0715	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 95% in Honors Algebra 2 OR</li> <li>• Minimum of 60% in Honors Precalculus with Trigonometry</li> </ul>		
	<p>This is the fourth of the Honors/AP Mathematics sequence. AP Precalculus with Trigonometry is a rigorous course for a highly accelerated math student. It requires a strong foundation in Algebra and Geometry. Major emphasis is placed on polynomial, rational, exponential, and logarithmic functions. This course also contains a study of Trigonometry from both the circular and right triangle perspectives. AP Precalculus with Trigonometry provides inquiry-based learning and practice on standardized test questions in a variety of formats including multiple choice, short response, and extended response. This is an AP course which leads to AP Calculus AB or AP Calculus BC.</p>		

## Mathematics

<b>Course Title:</b>	Honors Probability and Statistics (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0752	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 70% in Honors Algebra 2 or Academic Algebra 2</li> </ul>		
	<p>This course introduces the idea that statistics is the science of collecting, organizing, and interpreting numerical facts, known as data. Students will be presented methods of basic statistics in a way that emphasizes working with data and mastering statistical reasoning. The course will focus on the production and analysis of data as well as the traditional topics of probability and inference, which are used as tools to help students draw conclusions from data in an appropriate manner. Real world examples drive the exposition portion of the course. Additionally, students will learn the technique of least-squares regression, how to interpret the regression slope, and the conceptual ties between the correlation and the importance of looking for influential observations.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

<b>Course Title:</b>	AP Statistics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0751	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Honors Precalculus with Trigonometry or AP Precalculus with Trigonometry OR</li> <li>Minimum of 80% in Honors Calculus, AP Calculus AB, or AP Calculus BC OR</li> <li>Minimum of 90% in Academic Calculus OR</li> <li>Minimum of 60% in Honors Probability and Statistics</li> </ul>		
	<p>This course is devoted to developing the student's ability to interpret and investigate statistical data. The activities of decision-making and justifying hypotheses are of the highest importance. Topics studied include collecting and drawing conclusions from data, summarizing, displaying and describing distributions, probability rules and random variables, sampling distributions, inferences from data, least squares regression and correlation. The course uses an activity/project-oriented approach to develop the concepts. It will be necessary for each student to have a TI-83/TI-83+ calculator. This calculator will be used to produce, analyze, and interpret data. It is strongly recommended that the student take the AP exam upon completion of this course. The student should have a high level of maturity and interest in mathematics.</p>		

## Mathematics

<b>Course Title:</b>	College Algebra	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0731	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Algebra 2 and Topics</li> </ul>		
	<p>This is the fourth year of the Algebra1/Geometry/Algebra 2 Mathematics Sequence. Students enrolled in this course will utilize a College Algebra curriculum which addresses all the content outlined in the Common Core Standards. This program employs a research-based instructional approach that includes both inquiry-based learning and direct instruction.</p> <p>A smaller class setting is used to provide more individualized instruction and remediation. The purpose of this course is to meet the needs of the students requiring more assistance. The content of College Algebra is organized around families of functions, with emphasis on polynomial, quadratic, radical, and rational functions. As students learn about each family of functions, they will learn to represent them in multiple ways. The student will also learn to model real-life situations using functions to solve problems arising from those situations.</p>		

<b>Course Title:</b>	Academic Trigonometry with Functions	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0732	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Academic Algebra 2 in 11th grade OR</li> <li>Students who do not meet the minimum of 70% in Academic Algebra 3 with Trigonometry OR</li> <li>Minimum of 60% in Academic Algebra 3 in 11th grade</li> </ul>		
	<p>This is the fifth year of the Academic Mathematics sequence. Trigonometry with Functions uses an inquiry approach to the study of functions including analysis of graphs of functions, transformations of functions, combinations of functions and inverse functions. The study of trigonometry is approached from both the theoretical perspective as well as the application of right triangle concepts to real life problems. This course provides an extensive study of analytical trigonometry including the use of fundamental identities and the verification process of these identities, the solving of trigonometric equations along with the use of the sum and difference identities, multiple angle identities and other trigonometric relationships. This course also includes an extensive study of conic sections. The study of trigonometry provides a smooth transition to college mathematics.</p>		

## Mathematics

<b>Course Title:</b>	Academic Calculus	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0733	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 70% in Academic Algebra 3 with Trigonometry OR</li> <li>Students who do not meet the minimum of 80% in Honors Precalculus with Trigonometry OR</li> <li>Between 60-69% in AP Precalculus with Trigonometry</li> </ul>		
	<p>This is the fifth year of the Academic Mathematics sequence. Academic Calculus is an advanced level of mathematics equivalent to a college freshman course. This course will provide a foundation in calculus which deals with change and how the change in one quantity affects other quantities. We will discuss many of the functions used in calculus and review techniques from pre-calculus used to obtain the graphs of functions, and to transform known functions into new functions. This course will show students how to define and calculate limits, derivatives and integrals which are the three concepts that distinguish calculus from algebra and trigonometry. The development of these topics will explore the connection of these mathematical concepts and the relationship to other subject areas.</p>		

<b>Course Title:</b>	Honors Calculus (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0734	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Honors Precalculus with Trigonometry OR</li> <li>Minimum of 95% in Academic Algebra 3 with Trigonometry OR</li> <li>Minimum of 60% in Academic Calculus OR</li> <li>Between 70-79% in AP Precalculus with Trigonometry</li> </ul>		
	<p>This is the fifth year of the Honors Mathematics sequence. If students have completed four years of Honors Mathematics with a high level of achievement, they should consider this course. This course is the standard first course in calculus for Science, Engineering and Mathematics students. If some difficulty has been encountered in the Honors sequence, Academic Calculus should be considered as an option. If a student has experienced marginal success, he/she should consult their mathematics teacher for assistance with scheduling. Challenging for the able student, Honors Calculus covers many similar concepts as AP Calculus AB but at a slower pace. Students with a high level of achievement may elect to, but are not expected to, take the AP exam for college credit. These students would need to complete additional work outside of class to prepare for that exam. The course will cover elementary functions, limits, derivatives of algebraic and transcendental function, and basic integration with some application to the area.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p> <p>NOTE: For students taking this course in grade 10 or grade 11, another Calculus course may be taken prior to graduation. A student cannot earn more than 2.5 credits in Calculus.</p>		

## Mathematics

<b>Course Title:</b>	AP Calculus AB	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0735	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 90% in Honors Precalculus with Trigonometry OR</li> <li>• Minimum of 60% in Honors Calculus OR</li> <li>• Minimum of 95% in Academic Calculus OR</li> <li>• Between 80- 89% in AP Precalculus with Trigonometry</li> </ul>		
	<p>This is the fifth year of the Honors Mathematics sequence and the first year of the AP Mathematics sequence. AP Calculus AB is a course in sequence with Honors Precalculus with Trigonometry that will enable the student to take the AP exam (AB) for college credit and/or placement. Because of the rigor and fast pace, only those students with a high level of achievement in previous mathematics courses and the approval of the Honors Pre-Calculus Mathematics teacher will be accepted. The course will cover elementary functions, limits, derivatives of algebraic and transcendental functions, and basic integration with some application to area and volume. This course differs from the AP Calculus BC course, in that it is somewhat less rigorous, and because it meets only five periods per week, involves less homework and covers less material.</p> <p>NOTE: For students taking this course in grades 10, 11, or 12, another Calculus course may have already been taken prior to this may be taken after this. A student cannot earn more than 2.5 credits in Calculus.</p>		

<b>Course Title:</b>	AP Calculus BC (CHS)	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0736	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 95% in Honors Precalculus with Trigonometry. OR</li> <li>• Minimum of 90% in Honors Calculus OR</li> <li>• Minimum of 60% in AP Calculus AB OR</li> <li>• Minimum of 90% in AP Precalculus with Trigonometry</li> </ul>		
	<p>This is the fifth year of the Honors Mathematics sequence and the first or second year of the AP Mathematics sequence. AP Calculus BC is a course in sequence with the approval of their Honors Precalculus with Trigonometry that will enable the student to take the AP exam (Level BC) for college credit and/or placement. Because of the rigor and fast pace, only those students with the highest level of achievement in previous mathematics courses and the approval of their Honors Pre-Calculus Mathematics teacher will be accepted. The course will cover elementary vector and parametric functions, rigorous definitions of limits, derivatives of algebraic, transcendental, vector and parametric functions, integration involving area, volume, trigonometric substitution, and integration by parts and by partial fractions, and sequences and series. This course differs from the AP Calculus AB course, in that it meets seven periods per week, carries 1.5 credits, moves at a faster pace, is more rigorous, and involves more homework. NOTE: For students taking this course in grade 11 or grade 12, another Calculus course may have already been taken. A student cannot earn more than 2.5 credits in Calculus.</p>		

## Mathematics

<b>Course Title:</b>	Honors Linear Algebra (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0753	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in AP Calculus BC OR</li> <li>Minimum of 90% in AP Calculus AB</li> </ul>		
	<p>This college level course is designed to prepare students for subsequent course work in multi-variable calculus and modern algebra. Linear Algebra is used in abstract algebra, functional analysis, and has extensive applications to both natural sciences and social sciences. This course covers systems of equations, vector spaces, linear transformations and matrix representations, determinants, eigenvalues, and a variety of applications.</p> <p>Although this course is sequenced after AP Calculus BC or AP Calculus AB, there is no guarantee of colleges awarding credit for successful completion. It is recommended that students construct a portfolio of their work during the course for the purpose of helping colleges/universities determine appropriate mathematics placement.</p>		

<b>Course Title:</b>	Honors Computer Programming A (C++)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0747	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Advanced Algebra 1 (8M4) OR</li> <li>Minimum of 95% Academic Algebra 1 OR</li> <li>Minimum of 95% Computer Science A</li> </ul>		
	<p>Honors Computer Programming A is a one semester course designed to be the student's first experience in structured programming. The student will learn to use top-down design and step-wise refinement in designing programs using an appropriate programming language. The course will concentrate on problem-solving applied to familiar topics from mathematics, science, and business. The programming language used in this course is C++.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

## Mathematics

<b>Course Title:</b>	Academic Computer Science A (Python)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0741	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Algebra 1 (prior to Grade 9) OR corequisite of Algebra 1</li> </ul>		
	<p>Computer Science A is a one semester course designed to be the student's first experience in structured programming. The student will learn to use top-down design and stepwise refinement in designing programs using an appropriate programming language. The course will concentrate on problem-solving applied to familiar topics from Mathematics, Science, and Business. The programming language used in this course is Python.</p>		

<b>Course Title:</b>	Honors Computer Programming B (C++)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0748	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% Honors Computer Programming A (C++).</li> </ul>		
	<p>The major emphasis of Honors Computer Programming B is on extending the student's proficiency in programming methodology and understanding of algorithms and data structures. The implementation of this extension will be accomplished using an appropriate programming language. The high-level structured nature of the programming language will be utilized to develop solutions to problems by applying top-down design and modular programming methods. The topics and algorithms learned provide an excellent background for taking AP Computer Science. The programming language used in this course is C++.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		



## Mathematics

<b>Course Title:</b>	Academic Computer Science B (Python)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0742	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Academic Computer Science A (Python)</li> </ul>		
	<p>The major emphasis in this course is on extending the student's proficiency in the Python programming language methodology and understanding of algorithms and data structures. The implementation of this extension will be accomplished using an appropriate programming language. The high-level structured nature of the programming language will be utilized to develop solutions to problems by applying top-down design and modular programming methods. The topics and algorithms learned provide an excellent background for taking AP Computer Science. The programming language used in this course is Python.</p>		

<b>Course Title:</b>	AP Computer Science Principles	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0744	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 60% Algebra 1 (prior to Grade 9) OR corequisite of Algebra 1</li> </ul>		
	<p>AP Computer Science Principles is an introductory college-level course that is an in-depth exploration of the following concepts: creating and innovating with technology, investigating how data and information facilitate the creation of knowledge, writing computer programs, and learning how the Internet infuses modern computing. This course also builds computational thinking practices of code analysis, computational solution design, abstraction of program development, and reasonable computing.</p>		

## Mathematics

<b>Course Title:</b>	AP Computer Science (JAVA) (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0743	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10,11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 95% in Computer Science A. Completion of Computer Science B is strongly recommended.</li> <li>OR</li> <li>Minimum of 80% in AP Calculus AB or AP Calculus BC</li> <li>OR</li> <li>Minimum of 90% in AP Computer Science Principles</li> <li>OR</li> <li>Minimum of 80% in Honors Database Programming (SQL)</li> </ul>		
	<p>Advanced Placement Computer Science is an introductory course in computer Science focusing on Object Orientation. A large part of the course is built around the development of computer programs that are understandable, adaptable and when appropriate, reusable. In addition, an extensive library, packages for developing GUI (graphical user interface) applications, multiple classes, and methods make Java very suitable for the Internet. Programs are used in the development of algorithms, the development and use of fundamental data structures and real-world applications. A Case Study, large real-world program, is included as part of the AP curriculum. In addition, an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course. The programming language used in this course is Java.</p>		

<b>Course Title:</b>	Honors Database Programming (SQL)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0745	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>80% or better in Computer Science A or Computer Science B</li> <li>OR</li> <li>80% or better in AP Computer Science Principles</li> <li>OR</li> <li>70% or better in AP Computer Science</li> </ul>		
	<p>Database programming provides a comprehensive introduction to the language of relational databases. A large part of the course is built around Structured Query Language (SQL). This course also enables students to write retrieval queries and evaluate the result set, write SQL statements that edit existing data, write SQL statements that create database objects, understand the structure and design of relational databases, and understand the importance and major issue of database security and the maintenance of data integrity.</p> <p>The Advanced/Honors Mathematics courses are intended to be more challenging than Academic courses and are designed to provide multiple opportunities for students to take an increased responsibility for their own learning and achievement. These courses are designed for students who have demonstrated an advanced level of achievement in mathematics. The curriculum is distinguished by a difference in rigor and the quality of work, not merely the quantity.</p>		

## Mathematics

<b>Course Title:</b>	Beginning Computer Applications	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0746	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9,10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Beginning Computer Applications is a hands-on course providing an opportunity for students to learn practical software applications for use both in their other classes and in their personal lives. The course will be taught using PC's with one student per computer. Skills learned will be highly beneficial to the student in college or in the workplace.</p> <p>Topics include: Creating and updating web pages, database creation and management, using spreadsheets for data analysis and charting, creating graphical presentations, digital photography and scanning, photo manipulation and enhancement, desktop publishing, and creating drawings. Graphics and Internet searches are integrated into many of these projects. Time permitting, additional applications will be introduced to further enhance your experience.</p>		

<b>Course Title:</b>	Applied Math 9, 10, 11, 12, 12+	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0792 (9) 0793 (10) 0794 (11) 0795 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Placement in life skills support and autistic support and previously qualified for PASA</li> </ul>		
	<p>Applied Math is a course for students who require direct instruction in the area of functional mathematical computation and problem solving as determined by the IEP team. This course utilizes a curriculum that is aligned with the alternate standards.</p>		

<b>Course Title:</b>	Consumer Math	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0796 (11) 0797 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Consumer Math is a course for students who require direct instruction in the area of functional mathematical computation and problem solving as determined by the IEP team. This course utilizes a curriculum that applies math and problem solving to everyday, real-world scenarios involving math, budget, loans, banking, etc.</p>		

## Mathematics

<b>Course Title</b>	Algebra 1 A	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0760	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements</b>	<ul style="list-style-type: none"> <li>Minimum Of 60% in Math 8 (8M2)</li> </ul>		
	<p>Algebra 1A is the first year of a two year Algebra 1 course. Students enrolled in this course will utilize the Beginning Algebra curriculum, which addresses the first half of the content of a traditional Algebra 1 course. The program employs a research-based instructional approach that includes inquiry based learning and direct instruction.</p> <p>A smaller class setting is used to provide a more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The content of Algebra 1A includes a review of real numbers, equations, inequalities, graphing lines in multiple forms, systems of equations and inequalities, exponents, and operations with polynomials. The students will also learn to model real-life situations using functions to solve problems arising from those situations.</p>		

<b>Course Title</b>	Algebra 1 B	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0761	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements</b>	<ul style="list-style-type: none"> <li>Minimum of 60% in Algebra 1 A</li> </ul>		
	<p>Algebra 1B is the second year of a two year Algebra 1 course. Students enrolled in this course will utilize the Beginning Algebra curriculum, which addresses the second half of a traditional Algebra 1 course. The program employs a research-based instructional approach that includes inquiry based learning and direct instruction.</p> <p>A smaller class setting is used to provide a more individualized instruction and remediation. Additional attention is given to assist students in the acquisition of more abstract topics. The content of Algebra 1B includes factoring polynomials, rational expressions, roots and radicals, and quadratic functions. The students will also learn to model real-life situations using functions to solve problems arising from those situations. All students will take the Algebra 1 Keystone at the completion of this course.</p> <p>Note: The students that complete both Algebra 1A and Algebra 1B with a passing grade (60% or better) will earn 2 credits towards graduation at North Allegheny BUT will earn 1 credit towards NCAA Eligibility Requirements.</p>		

## Music

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
0.5	Music Production 1	0801	9,10,11,12
0.5	Music Production 2	0802	9,10,11,12
0.5	Honors Music Production 3	0803	9,10,11,12
0.5	Music Technology and Songwriting 1	0851	9,10,11,12
0.5	Music Technology and Songwriting 2	0852	9,10,11,12
0.5	Music Technology and Songwriting 3	0853	9,10,11,12
0.5	Music Technology and Songwriting 4	0854	9,10,11,12
0.5	Vocal Music	0809	9,10,11,12
1.0	String Orchestra-NAI	0832	9,10
1.0	Honors Chamber Orchestra-NAI	0835	9,10
1.0	9th Grade Chorus	0812	9
0.5	9th Grade Chorus	0811	9
1.0	10th Grade Chorus	0814	10
0.5	10th Grade Chorus	0813	10
1.0	Honors Treble Singers-NAI	0815	9,10
1.0	Honors Wind Ensemble-NAI	0825	9,10
1.0	Symphonic Band-NAI	0823	10
1.0	Concert Band-NAI	0821	9
1.0	Honors Chamber Choir-NASH/NAI	0866	10,11,12
1.0	String Orchestra-NASH	0882	11,12
1.0	Honors Chamber Orchestra-NASH	0885	11,12
1.0	Honors Music Theory-NASH	0858	12

## Music

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Advanced Placement Music (CHS)	0857	11,12
1.0	Honors Wind Ensemble-NASH	0875	11,12
1.0	Symphonic Band-NASH	0873	11,12
1.0	Concert Band-NASH	0871	11,12
1.0	Concert Choir (SA)-NASH	0861	11,12
1.0	Concert Choir (TB)-NASH	0862	11,12
1.0	Honors Treble Singers-NASH	0865	11,12
0.5	Computer Multimedia Arts	0806	11,12
0.5	Advanced Computer Multimedia Arts	0807	11,12

**(CHS) Indicates College in High School Course**

## Music

<b>Course Title:</b>	Music Production 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0801	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, & 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course includes studies classified as music ear training, music writing, sight-reading, analysis, and composing. The student will learn how to hear music and write it down, how to read music, how to write music, how to analyze music, and how to compose music. This course is an absolute must for anyone considering a career in music. It will also provide the non-music major with valuable skills that will enable him/her to understand and enjoy music better. Students do not have to be able to play an instrument to take this course nor is any prior music background required.</p>		

<b>Course Title:</b>	Music Production 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0802	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Music Production 1</li> </ul>		
	<p>This course is an extension of Production 1. This level includes more advanced studies of melody and harmony. The student will continue to develop skills needed to learn how to hear music and write it down, how to read music, how to write music, how to analyze</p>		

<b>Course Title:</b>	Honors Music Production 3	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0803	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Music Production 1</li> </ul>		
	<p>This course is an extension of Production 3. This level includes more advanced studies of the production of music. The student will continue to develop skills needed to learn how to master music, how to record music, how to analyze music, and how to compose music.</p>		

<b>Course Title:</b>	Music Technology and Songwriting 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0851	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed to give students the ability to create original music, and learn to use different kinds of instruments and sound-generating and recording equipment. Students will express ideas to others by writing, performing, and recording music. Included is arranging for various instrument kinds, learning how artists develop their musical idea, and how to develop a musical idea into a final project. Topics covered include: melody, harmony, rhythm, texture, form, and various song styles.</p>		

## Music

<b>Course Title:</b>	Music Technology and Songwriting 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0852	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Music Technology and Songwriting 1</li> </ul>		
	<p>This course is a continuation of Music Technology and Songwriting 1. The student will create projects through the use of recording techniques, sound synthesizers and computers. The course also includes activities to improve the student's listening and analysis skills.</p>		

<b>Course Title:</b>	Music Technology and Songwriting 3	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0853	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Music Technology and Songwriting 2</li> </ul>		
	<p>This course is a continuation of Music Technology and Songwriting 2. This level includes more advanced studies of melody and harmony. The student will continue to develop skills needed in order to compose and perform music. Topics covered include: advanced melody, advanced harmony, advanced rhythm, advanced texture, advanced form, and various song styles.</p>		

<b>Course Title:</b>	Music Technology and Songwriting 4	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0854	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Music Technology and Songwriting 3</li> </ul>		
	<p>This course is a continuation of Music Technology and Songwriting 3. Activities in this course include: Creating original music, learning to use different kinds of instruments and sound-generating equipment, and how to express ideas to others by writing, performing, and recording music. Included is arranging for various instrument kinds, learning how artists develop their musical idea, and how to develop a musical idea into a final performance. Topics covered include: melody, harmony, rhythm, texture, form, and various song styles.</p>		

<b>Course Title:</b>	Vocal Music	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0809	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10 ,11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed to engage students in music-making with their singing voice to understand musical elements such as style, rhythm, tone, tuning, harmony, and vocal repertoire. Repertoire is assigned based on vocal range and ability across a variety of styles. Performances outside of class are optional.</p>		



## Music

<b>Course Title:</b>	String Orchestra-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0832	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course requires previous experience on a string instrument.</li> </ul>		
	String Orchestra is for students with previous experience playing violin, viola, cello, or bass. Students will further develop their performance and ensemble skills. Students should be aware that participation is required in school concerts as well as outside-of-school performances.		

<b>Course Title:</b>	Honors Chamber Orchestra-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0835	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	Honors Chamber Orchestra is a string ensemble designed for advanced musicians in grades 9 and 10. The repertoire is challenging and covers a diverse range of style and technique. Students should be aware that participation is required in school concerts as well as outside-of-school performances.		

<b>Course Title:</b>	9th Grade Chorus	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0812	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	All types and styles of music are sung and performed in this course. The object of the course is to help develop the voice into a mature instrument.		

<b>Course Title:</b>	9th Grade Chorus	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0811	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	Same as the Choral 1, (full year/full time), but on a part-time basis for 0.5 credit. All types and styles of music are sung and performed in this part-time course. The object of the course is to help develop the voice into a mature instrument.		

## Music

<b>Course Title:</b>	10th Grade Chorus	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0814	<b>STEM:</b>	No
<b>NCAA:</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	Choral 2 is a full-time sequential course designed to lead to Mixed Choir and Concert Choir in the High School. The course explores all types of music and concentrates on the development of the voice and four-part ensemble singing.		

<b>Course Title:</b>	10th Grade Chorus	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0813	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	This is a separate course on a part-time basis for 0.5 credits. A sequential course designed to lead to Mixed Choir and Concert Choir, the course explores all types of music and concentrates on the development of the voice and four-part ensemble singing.		

<b>Course Title:</b>	Honors Treble Singers-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0815	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	This course is a vocal ensemble designed for advanced treble voices in grades 9 and 10. The repertoire is challenging and covers a diverse range of style and vocal abilities. Students should be aware that participation is required in school concerts as well as outside-of-school performances. Emphasis will be placed on sight-reading, adaptations of different styles of music, and diction. <i>Special</i> attention will be placed on the blending of voices and vocal quality.		

## Music

<b>Course Title:</b>	Honors Wind Ensemble-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0825	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Intermediate High School Wind Ensemble is designed for the most serious and advanced brass, woodwind, and percussion students in grades 9 and 10. This ensemble will rehearse, study, and perform the most advanced music written for the modern band as well as orchestral transcriptions. Students are expected to have a highly developed sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, advanced theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

<b>Course Title:</b>	Symphonic Band-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0823	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Intermediate High School Wind Ensemble is designed for the most serious and advanced brass, woodwind, and percussion students in grade 10. This ensemble will rehearse, study, and perform the most advanced music written for the modern band as well as orchestral transcriptions. Students are expected to have a highly developed sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, advanced theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

## Music

<b>Course Title:</b>	Concert Band-NAI	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0821	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Intermediate High School Wind Ensemble is designed for the most serious and advanced brass, woodwind, and percussion students in grade 9. This ensemble will rehearse, study, and perform the most advanced music written for the modern band as well as orchestral transcriptions. Students are expected to have a highly developed sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, advanced theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

<b>Course Title:</b>	Honors Chamber Choir-NAI/NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0866	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>This course is a vocal ensemble designed for only the most serious singer. The music we will learn will cover many different styles of music with more challenging literature than previously handled. Students should be aware that participation is required in school concerts as well as outside-of-school performances. Emphasis will be placed on sight-reading, adaptations of different styles of music, and diction. <i>Special</i> attention will be placed on the blending of voices and vocal quality</p>		

<b>Course Title:</b>	String Orchestra-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0882	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course requires previous experience on a string instrument.</li> </ul>		
	<p>String Orchestra is for students with previous experience playing violin, viola, cello, or bass. Students will further develop their performance and ensemble skills. Students should be aware that participation is required in school concerts as well as outside-of-school performances.</p>		

## Music

<b>Course Title:</b>	Honors Chamber Orchestra-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0885	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>Honors Chamber Orchestra is a string ensemble designed for advanced musicians in grades 11 and 12. The repertoire is challenging and covers a diverse range of style and technique. Students should be aware that participation is required in school concerts as well as outside-of-school performances.</p>		

<b>Course Title:</b>	Honors Music Theory-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0858	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who complete AP Music with an 80% or better.</li> </ul>		
	<p>The Honors Music Theory class is designed for students who have an interest in becoming a well-rounded musician. It is open to all seniors who have previous experience in music theory courses and have taken AP Music.</p> <p>The class meets every day for the entire school year. It incorporates advanced web-based lessons, harmonic analysis, music history, aural development, sight singing, composition, keyboard harmony, and melodic dictation. Students utilize a variety of music writing software to create original compositions. Honors Music Theory delivers individualized advanced instruction in music theory, composition, and aural skills.</p> <p>Honors Music Theory is a natural progression from AP Music Theory. The class meets every day for the entire school year. It focuses on advanced harmonic analysis, part-writing procedures, and non-traditional harmony. There is also a strong emphasis on advanced aural skills and creative composition leading up to 20<sup>th</sup> Century music including non-traditional instruments and technologies.</p>		

## Music

<b>Course Title:</b>	Advanced Placement Music (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0857	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of any of the following: Music Production 1 with a 80% or better, Music Technology and Songwriting 1 with a 80% or better, successful completion of the Music Theory Placement Test.</li> </ul>		
	<p>Advanced Placement Music is designed for students who have a desire to develop their knowledge and application of music theory and composition to the highest level. It is open to all juniors and seniors who have previous experience in music theory courses, music technology courses, or previous theory knowledge.</p> <p>The class incorporates harmonic analysis, music history, aural development, sight singing, composition, keyboard harmony, and melodic dictation. Students utilize a variety of music writing software to create original compositions. AP Music provides an opportunity for students to take more time to develop aural skills and compositional techniques. During the second half of the semester, the course content focus is on preparation for the AP Music Theory exam. Students who wish to continue their study of music theory throughout their junior and senior years are encouraged to take AP Music Theory during the junior year and Honors Music Theory during the senior year.</p>		

<b>Course Title:</b>	Honors Wind Ensemble-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0875	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Senior High School Wind Ensemble is designed for the most serious and advanced brass, woodwind, and percussion students in grades 11 and 12. This ensemble will rehearse, study, and perform the most advanced music written for the modern band as well as orchestral transcriptions. Students are expected to have a highly developed sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, advanced theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

## Music

<b>Course Title:</b>	Symphonic Band-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0873	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Senior High School Symphonic Band is designed for the advancing brass, woodwind, and percussion students in grades 11 and 12. This ensemble will rehearse, study, and perform medium to advanced music written for the modern band as well as orchestral transcriptions. Students are expected to have an above average sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

<b>Course Title:</b>	Concert Band-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0871	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>The Senior High School Concert Band is designed for brass, woodwind, and percussion students in grades 11 and 12. This ensemble will rehearse, study, and perform a variety of music written for the modern band as well as orchestral transcriptions. Students are expected to have a sense of tone, intonation, rhythm, harmony, and articulation. In addition to the band repertoire, theoretical and technical concepts appropriate to individual instruments will also be addressed. Students should be aware that participation is <i>required</i> in school concerts as well as outside-of-school performances. There may also be <i>required</i> after school rehearsals. Musicians wishing to participate in AV, PMEA, or NAFME Honors Festivals, Marching Band, and/or chamber ensembles including Jazz Ensemble and Percussion Ensemble must be enrolled in Wind Ensemble, Symphonic Band, or Concert Band.</p>		

<b>Course Title:</b>	Concert Choir (SA)-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0861	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	<p>Emphasis is placed on learning and performance of choral music of various periods. Participation in outside-of-school activities is <i>required</i>.</p>		

## Music

<b>Course Title:</b>	Concert Choir (TB)-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0862	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	Emphasis is placed on learning and performance of choral music of various periods. Participation in outside-of-school activities is <i>required</i> .		

<b>Course Title:</b>	Honors Treble Singers-NASH	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0865	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is available only by audition and approval of the Director.</li> </ul>		
	This course is a vocal ensemble designed for advanced treble voices in grades 11 and 12. The repertoire is challenging and covers a diverse range of style and vocal abilities. Students should be aware that participation is required in school concerts as well as outside-of-school performances. Emphasis will be placed on sight-reading, adaptations of different styles of music, and diction. <i>Special</i> attention will be placed on the blending of voices and vocal quality. Participation in outside- of-school activities is <i>required</i> . Members will participate in all the same events (i.e., trips, tours, and competitions) as Concert Choir members.		

<b>Course Title:</b>	Computer Multimedia Arts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0806	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	In this course, the students design and create original digital art and multimedia presentations that include animation, video, photography, graphics, and sound. Students shoot, edit, composite, and create special effects in video using professional digital video software. Students create rotoscope and stop-motion animations. Students learn sound recording, editing, and design and compose music using professional music software. In the independent final project, students are encouraged to work to their interests and strengths, emphasizing a particular subject or artistic discipline. Projects have included digital art or music portfolios, website development, online exhibits, learning games, multimedia stage performances, and interactive presentations on a variety of topics.		



## Music

<b>Course Title:</b>	Advanced Computer Multimedia Arts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0807	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Successful completion of Computer Multimedia Arts</li> </ul>		
	<p>Advanced Computer Multimedia Arts allows students to continue to design and create original media rich presentations, videos, animations, websites, and interactive games. This course builds upon photomontage, sound design, digital video, and animation concepts from the Multimedia Arts course. Students will explore advanced layout techniques, video mapping, augmented animation styles, and post-production video effects. Students will have the opportunity to create architectural projections, vector-based art, interactive portfolios, and mixed media installations.</p> <p>The course emphasizes conception and planning, solving design challenges, personal artistic expression, and communication through new media technology. The course provides a foundation for careers in the growing fields of web development, print/layout, and multimedia design.</p>		

## Science

Every student must take a Biology course in Grade 9. This graduation requirement is based on the North Allegheny School District High School [Graduation Requirements Board Policy #217](#) for compliance with State Board of Education Regulations and Keystone Exams legislation.

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Biology (IMPACT)*	0901	9
1.0	Biology	0902	9
1.5	Academic Biology	0903	9
1.5	Honors Biology	0904	9
1.0	Introduction to Physics & Chemistry (IMPACT)*	0931	10
1.0	Introduction to Physics & Chemistry	0932	10
1.0	Academic Introduction to Physics & Chemistry	0933	10
1.5	Honors Chemistry	0914	10,11,12
1.0	Applied Science 1	0981	11,12
1.0	Applied Science 2	0982	11,12
1.0	Environmental Science	0952	11,12
1.0	Honors Environmental Science	0954	11,12
1.0	AP Environmental Science	0955	11,12
1.0	Astronomy	0962	11,12
1.0	Honors Astronomy	0964	11,12
1.5	Academic Chemistry	0913	11,12
1.0	Honors Organic Chemistry	0984	11,12
1.5	AP Chemistry (CHS)	0915	11,12
1.0	Honors Meteorology	0983	11,12
1.0	Academics Physics	0923	11,12
1.5	Honors Physics	0924	11,12
1.5	AP Physics 1 & 2 (CHS)	0927	11,12

\* These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.

(CHS) Indicates College in High School Course

## Science

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	AP Physics 1	0925	11,12
1.0	AP Physics 2	0926	11,12
1.5	AP Physics C	0928	11,12
1.0	Academic Anatomy & Physiology	0943	11,12
1.0	Honors Anatomy & Physiology	0944	11,12
1.5	AP Biology (CHS)	0905	11,12

\* These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.

(CHS) Indicates College in High School Course

## Science

<b>Course Title:</b>	Biology (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0901	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>This course presents the processes, structures, and functions of living organisms. Students will engage in basic experiments, investigations, and discussions to learn about cells, heredity, evolution, and ecology. This class meets five periods each week.</p>		

<b>Course Title:</b>	Biology	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0902	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course provides a dual microscopic/macrosopic approach that covers life at all levels of biological organization. It takes an intriguing look into what different organisms have in common as well as how they interact with each other. Classroom discussions, investigations, demonstrations, and laboratory activities are included to enhance student learning while promoting collaboration and teaching critical thinking skills. Topics include cells, biochemistry, heredity, evolution, and ecology, with practical applications for each. This class meets five periods each week.</p>		

<b>Course Title:</b>	Academic Biology	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0903	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 85% in 8<sup>th</sup> grade Science.</li> <li>Minimum of 75% in Advanced Algebra 1 (or a higher-level Mathematics course) or minimum of 85% in Academic Algebra 1.</li> </ul>		
	<p>This course is a comprehensive approach to life science with an emphasis on structural and functional relationships at both the micro- and macroscopic levels of study. Students will frequently work cooperatively to perform hands-on inquiry based experiments and activities in areas such as biochemistry, heredity, evolution, ecology, and the cellular basis of life, with practical applications of each. This class meets seven/eight periods each week. Students should expect a workload commensurate with the level of the class, including some independent study, on grade-level reading, and mathematical computation.</p>		

## Science

<b>Course Title:</b>	Honors Biology	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0904	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 93% in 8<sup>th</sup> grade Science.</li> <li>• Minimum of 85% in Advanced Algebra 1 (or a higher-level Mathematics course) or minimum of 95% in Academic Algebra 1.</li> </ul>		
	<p>This course is an in-depth approach to life science with an emphasis on structural and functional relationships at both the micro- and macroscopic levels of study. Students will frequently work cooperatively to perform hands-on inquiry based experiments and activities in areas such as biochemistry, heredity, evolution, ecology, and the cellular basis of life. The ability to apply knowledge to novel applications is expected. This class meets seven/eight periods each week. Students should expect a rigorous workload commensurate with the level of the class, including independent study, advanced reading, and mathematical computation.</p>		

<b>Course Title:</b>	Introduction to Physics & Chemistry (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0931	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>Introduction to Physics and Chemistry is a study of the nature and behavior of all non-living things in the natural world. This course uses laboratory exercises, demonstrations, and other classroom experiences to help students learn about the physical world. Laboratory experiments and demonstrations will supplement classroom discussion. Instructional modifications are made to help students understand scientific concepts. Team building and motivation play a major part in all aspects of the IMPACT program.</p>		

<b>Course Title:</b>	Introduction to Physics & Chemistry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0932	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>Students in Introduction to Physics and Chemistry will use laboratory exercises, demonstrations, and other classroom experiences to learn about the non-living physical world. Students will have one semester of introductory physics and one semester of introductory chemistry. This is primarily a learning-by-doing course and students should be capable of learning by inquiry and working cooperatively in small group and large group laboratory situations. This class meets five periods per week.</p>		

## Science

<b>Course Title:</b>	Academic Introduction to Physics & Chemistry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0933	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Geometry (or a higher-level Mathematics course) OR minimum of 85% in Academic Geometry.</li> <li>• Minimum of 80% in Academic Biology OR minimum of 95% in Biology.</li> </ul>		
	<p>Academic Introduction to Physics and Chemistry is designed for the student who is capable of learning the laws of nature primarily through hands-on investigations and analyzing the results through complex mathematical and graphical comparisons. Students are expected to explain the analyses of their investigations through properly written conclusion statements following techniques used by true scientists. Students will have one semester of introductory physics and one semester of introductory chemistry. Students should be capable of learning by inquiry and working cooperatively in small group and large group laboratory situations. This class meets five periods per week.</p>		

<b>Course Title:</b>	Honors Chemistry	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0914	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	10-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<p>For students entering grade 10:</p> <ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Biology or minimum of 95% in Academic Biology.</li> <li>• Minimum of 85% in Honors Geometry or a higher-level Mathematics course, or minimum of 95% in Academic Geometry.</li> </ul> <p>For students entering grade 11 or 12:</p> <ul style="list-style-type: none"> <li>• Minimum of 85% in Honors Biology or minimum of 95% in Academic Biology and minimum of 85% in Academic Introduction to Physics, and Chemistry.</li> <li>• Minimum of 80% in Honors Geometry or a higher-level Mathematics course, or minimum of 95% in Academic Geometry.</li> </ul>		
	<p>Honors Chemistry utilizes a problem-solving approach to chemistry requiring extensive use of algebra, geometry, and other mathematical processes. This course focuses on the mathematical solutions of chemical problems and the analytical use of experimental laboratory data in areas such as measurement, matter and energy, atomic structure, periodicity, and chemical reactions. Honors Chemistry is geared toward students who demonstrate strong skills in the areas of mathematics and science and meets 7/8 periods per week.</p>		

## Science

<b>Course Title:</b>	Applied Science 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0981	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Approval by School Counselor and Science Department Chair.</li> </ul>		
	<p>This course is a part of a two-year course sequence in which the student will study the four major branches of science. Basic concepts of general science as it applies to everyday living are offered. This course will focus on the use of the scientific method to investigate elements of biology, the human body, elements of physics, motion and Newton's laws, and space science. This course is designed with the intent to have the student learn about a topic in science and then apply it to an everyday situation. The topics for Applied Science 1 will always be different from the topics in Applied Science 2 so that the student can earn two credits of science if desired (or needed for graduation) at the Senior High.</p>		

<b>Course Title:</b>	Applied Science 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0982	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Approval by School Counselor and Science Department Chair</li> </ul>		
	<p>This course is part of a two-year course sequence in which the student will study the four major branches of science. Basic concepts of general science as it applies to everyday living are offered. This course will focus on the use of the scientific method to investigate elements of chemistry, physical and chemical changes, changes in the state of matter, elements of physics, waves, sound, light, optics, and electricity. This course is designed with the intent to have the student learn about a topic in science and then apply it to an everyday situation. The topics for Applied Science 1 will always be different from the topics in Applied Science 2 so that the student can earn two credits of science if desired (or needed for graduation) at the Senior High.</p>		

<b>Course Title:</b>	Environmental Science	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0952	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion of an Introduction to Physics &amp; Chemistry (or Chemistry) course and a Biology course</li> </ul>		
	<p>The goal of this course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will be required to gather and analyze information from many different disciplines. This course is a scientific study of the natural world and how it is influenced by people. Major topics include ecology, human population, Earth's resources, pollution, energy, biodiversity, and global change. Scientific inquiry is integrated throughout the course.</p>		

## Science

<b>Course Title:</b>	Honors Environmental Science	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0954	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Introduction to Physics &amp; Chemistry (or Chemistry) course and minimum of 80% in a Biology course.</li> </ul>		
	<p>The Honors Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. This is stressed throughout the course of the year. Projects, current events and lab activities will play a critical role throughout the course.</p>		

<b>Course Title:</b>	AP Environmental Science	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0955	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in honors biology or minimum of 90% in academic biology</li> <li>Minimum of 80% in honors chemistry or minimum of 90% in academic chemistry</li> </ul>		
	<p>This course is a study of interrelationships that equip students with the necessary information to understand the complexity of environmental concerns, problems, and alternative courses of action. Interactions between human populations and their environment, as well as basic ecological principles, environmental policy, ethics, resource use, and conservation, are addressed. Students will study environmental problems, both natural and human-made, to evaluate the relative risks associated with these problems and examine alternative solutions for resolving and/or preventing those problems. Sustainability and scientific inquiry are weaved throughout the course. Lab activities and case studies will play a major role. Students should have developed skills in reading, writing, biology, chemistry, and mathematics to support their work.</p>		

<b>Course Title:</b>	Astronomy	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0962	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion of some level of Algebra 1</li> </ul>		
	<p>This course emphasizes historical contributions in the development of scientific thought about the earth and space. In this course, we will explore our universe. Students will first learn about Earth and the celestial sphere, seasons, models of the universe, and the governing laws. Students will also learn about space explorations and colonization, the solar system, and the stars, including their features and evolution. Laboratory experiments, worksheets, field work, projects, Starry Night Computer Simulation, videos, and class discussion will enhance the student's understanding and appreciation of our precious planet and our amazing universe!</p>		



## Science

<b>Course Title:</b>	Honors Astronomy	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0964	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Algebra.</li> </ul>		
	<p>Astronomy is the science that deals with the study of the heavens and the realms extending from the Earth's atmosphere to the distant reaches of the universe. In this course, the topics that will be studied are stars and constellations, the solar system, celestial sphere, seasons, models of the universe, and the governing laws and principles that explain the Earth's systems and how the cosmos operates. The analysis and calculations of some topics are more in-depth than in the regular Astronomy course. It is recommended, but not required, that students be enrolled in or have completed a chemistry or physics course. This course CANNOT be taken concurrently with Astronomy.</p>		

<b>Course Title:</b>	Academic Chemistry	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0913	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Academic Algebra 1, minimum of 90% in Essentials of Algebra I Part 2 or minimum of 75% in a higher level Mathematics course.</li> <li>Minimum of 80% in Academic Introduction to Physics and Chemistry or minimum of 90% in Introduction to Physics and Chemistry.</li> </ul>		
	<p>Academic Chemistry is a college preparatory course that explores the fundamental principles of chemistry through classroom lecture and laboratory experimentation. This course covers the qualitative and quantitative aspects of scientific measurement, the nature of matter, atomic theory, nomenclature, chemical reactions, stoichiometry, chemical bonding, and more. Solving various mathematical problems related to chemical concepts is an integral part of the course. Academic Chemistry meets 7/8 periods per week.</p>		

<b>Course Title:</b>	Honors Organic Chemistry	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0984	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Honors Chemistry or minimum of 90% in Academic Chemistry</li> <li>Completion of Academic Algebra 2 or Honors Algebra 2</li> </ul>		
	<p>This is a demanding, lecture-oriented course that deals with the chemistry of carbon compounds, their structure, nomenclature, reaction mechanisms, and syntheses. It is roughly equivalent to one and a half semesters of college-level organic chemistry. Students who intend to pursue a career in chemistry, medicine, pharmacy, biology, nursing, or veterinary medicine will find this course extremely beneficial.</p>		

## Science

<b>Course Title:</b>	AP Chemistry	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0915	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Chemistry or minimum of 90% in Academic Chemistry</li> <li>• Completion of Academic Algebra 2 or Honors Algebra 2</li> </ul>		
	<p>The AP Chemistry course is designed to be the equivalent of two semesters of undergraduate introductory chemistry, usually taken by science/engineering majors during their first year of college. Textbooks and laboratory sessions are designed to cover the range and depths of college-level chemistry and will provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of chemistry.</p>		

<b>Course Title:</b>	Honors Meteorology	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0983	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Current enrollment in, or completion of, any level of physics.</li> </ul>		
	<p>Students who take this course investigate the structure of severe storm systems, including super cell thunderstorms, hurricanes, and blizzards. They also explore and discuss ways to handle the dangers associated with them. Additionally, they become proficient in knowledge regarding weather basics, including the layers of the atmosphere, energy exchanges, formation of clouds, types of precipitation, weather instruments, atmospheric optics, and forecasting techniques. Current topics such as climate change, global warming, the thinning of the ozone layer, and alternative energy sources will also be studied. This course is conceptually based and uses only minimal mathematical skills.</p>		

<b>Course Title:</b>	Academic Physics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0923	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Completion of Academic Chemistry, Honors Chemistry, or concurrent enrollment in an engineering or aerospace course.</li> <li>• Completion of some level of Algebra 1</li> </ul>		
	<p>This course is intended for college-bound students who are interested in a non-science career. Students will study the following topics: classical mechanics, waves, sound, optics, electrostatics, and magnetism. Although this class stresses concepts over computations, a basic knowledge of algebra, geometry, and trigonometry is required.</p>		

## Science

<b>Course Title:</b>	Honors Physics	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0924	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Completion of Honors Chemistry or minimum of 90% in Academic Chemistry.</li> <li>• Completion of Honors Algebra 2 or minimum of 90% in Academic Algebra 2.</li> </ul>		
	<p>This course stresses the mathematical and conceptual development of the following topics: mechanics, electricity, waves, sound, and optics. Mathematical problem-solving, including algebraic manipulation, systems of equations, trigonometric functions, logarithms, and graphical analysis are used extensively. Laboratory exercises are included to enhance the development of concepts and data analysis techniques. Honors physics is designed for the college-bound student and for the student preparing for the Advanced Placement 1 &amp; 2 and C level courses. This course meets 7/8 periods each week.</p>		

<b>Course Title:</b>	AP Physics 1&2	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0927	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Algebra 2 or minimum of 95% in Academic Algebra 2.</li> <li>• Minimum of 80% in Honors Chemistry or minimum of 90% in Academic Chemistry.</li> </ul>		
	<p>The topics covered in AP Physics 1&amp;2 include classical mechanics (linear and angular kinematics and dynamics and conservation laws), thermodynamics, fluid statics and dynamics, electricity and magnetism, waves and light, and topics in modern physics. The large number of objectives for the course and the highly analytical nature of the problem-solving make it very demanding. This course is equivalent to a two-semester terminal algebra-based physics course at the college-level. Mathematics, including trigonometry, geometry, and algebra will be used extensively in this course to solve problems and develop relationships between physical quantities. Please note that there are two separate AP exams associated with this course: one for AP Physics 1 and a second for AP Physics 2.</p>		

<b>Course Title:</b>	AP Physics 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0925	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Algebra 2 or minimum of 95% in Academic Algebra 2.</li> <li>• Minimum of 80% in Honors Chemistry or minimum of 90% in Academic Chemistry.</li> </ul>		
	<p>The topics covered in AP Physics 1 include classical mechanics (linear and angular kinematics and dynamics and conservation laws), waves, and fluid statics and dynamics. This course is equivalent to a one-semester algebra-based physics course at the college-level. The course is valuable to the student in two ways: the experience of having taken a college-level science class in high school will be a tremendous help when the student is in college. Secondly, the student will have the opportunity to take the AP Physics 1 exam at the end of the year. Mathematics, including trigonometry, geometry, and algebra, will be used extensively in this course to solve problems and develop relationships between physical quantities.</p>		

## Science

<b>Course Title:</b>	AP Physics 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0926	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in Honors Physics or AP Physics 1.</li> </ul>		
	<p>This course is designed to meet the demands of the AP Physics 2 syllabus as published by the College Board. The first unit of Physics 2 builds on the last unit of Physics 1, exploring electrostatic phenomena in more detail, and then using this information to analyze electric circuits in greater depth. It is very important that students have a firm grasp of the basic concepts of physics, as only some of the material is reviewed. Topics for this course include electric field and circuit analysis, magnetism, fluid dynamics and thermodynamics, geometric &amp; physical optics, modern topics, and atomic &amp; nuclear physics. The student may earn college credit by taking the AP Physics 2 exam at the end of the year.</p>		

<b>Course Title:</b>	AP Physics C	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0928	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 80% in AP Chemistry or Honors Chemistry.</li> <li>Minimum of 80% in any other Physics course.</li> <li>Completion of or current enrollment in AP Calculus or Honors Calculus.</li> </ul>		
	<p>The AP Physics C course is designed to be the equivalent of two college introductory calculus-based physics courses. This course encompasses the calculus based Introductory Classical Mechanics, and the calculus based Introductory Classical Electricity and Magnetism course. These two courses are usually taken by science/engineering majors during their first or second year of college. Textbooks and laboratory sessions are designed to cover the range and depths of college-level calculus-based classical mechanics and classical electricity and magnetism, and it will provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of physics.</p>		

<b>Course Title:</b>	Academic Anatomy & Physiology	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0943	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Completion of some level of Biology.</li> </ul>		
	<p>Academic Anatomy &amp; Physiology is designed for students who are interested in learning about the structures and functions of body systems, their interactions, and disorders affecting those systems. A considerable amount of time will be devoted to lab work (modeling, simulations, and dissection), lectures, cooperative group learning, hands-on activities, and demonstrations. This course is recommended for any student interested in furthering their understanding of the human body.</p>		

## Science

<b>Course Title:</b>	Honors Anatomy & Physiology	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	0944	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Completion of Honors Biology OR minimum of 80% in Academic Biology, OR minimum of 90% in Academic Anatomy &amp; Physiology.</li> <li>• Minimum of 80% in Academic Chemistry OR minimum of 75% in Honors Chemistry.</li> </ul>		
	<p>This course is designed for college-bound students who are interested in the structure and function of the major systems in the human body. Considerable time is devoted to lecture, clinical, practical, and laboratory applications. Honors Anatomy and Physiology is recommended for college-bound students, especially those interested in a medical or science related field.</p>		

<b>Course Title:</b>	AP Biology	<b>Credit Value:</b>	1.5
<b>Course Number:</b>	0905	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 80% in Honors Biology OR 90% in Academic Biology.</li> <li>• Minimum of 75% in Honors Chemistry OR minimum of 93% in Academic Chemistry.</li> </ul>		
	<p>AP Biology is the equivalent of a one-year college or university course in biology, taught within the parameters of high school. Students explore fundamental concepts in the life sciences that are structured around the four big ideas, enduring understandings, and science practices that are defined by the <i>AP Biology Curriculum Framework</i>. Students will also develop advanced reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across all domains of life. As students develop an appreciation for the study of life, they will be able to identify and understand unifying principles within a diversified biological world. Because our understanding of biology today is a result of inquiry, the process of inquiry in science and developing critical thinking skills is one of the most important parts of this course.</p>		

## Science Pathway Chart

*Three Science credits are needed for graduation. Students should consult with their teacher for the best option.*

*Every student must take a Biology course in Grade 9. This graduation requirement is based on the [North Allegheny School District High School Graduation Requirements Board Policy #217](#) for compliance with State Board of Education Regulations and [Keystone Exams](#) legislation.*

The following are some typical science pathways. Regardless of their current pathway, students are able to move up/down levels based on their past performance and course requirements each year. 11th and 12th grade students are eligible to take more than one science course per year as elective credits.

<u>GRADE / COURSE</u>	<u>OPTIONS / ELECTIVES</u>
9 - Biology (IMPACT) 10 - Intro to Physics & Chemistry (IMPACT) 11 or 12 - Applied Science 1 or Applied Science 2	
9 - Biology 10 - Intro to Physics & Chemistry 11 or 12 - Environmental Science (or other NASH science elective) 11 or 12 - Astronomy (or other NASH science elective)	
9 - Academic Biology 10 - Intro to Physics & Chemistry 11 - Academic Chemistry 12 - Academic Physics OR 9 - Academic Biology 10 - Academic Intro to Physics & Chemistry 11 - Academic Chemistry or Honors Chemistry 12 - Academic Physics or Honors Physics OR 9 - Honors Biology 10 - Honors Chemistry 11 - Honors Physics and/or Science Elective(s) 12 - Science Elective(s)	<b><u>NASH Only Electives</u></b> Environmental Science Honors Environmental Science Astronomy Honors Astronomy Honors Organic Chemistry Honors Anatomy & Physiology Honors Meteorology Academic Anatomy & Physiology AP Biology AP Chemistry AP Environmental Science AP Physics 1 AP Physics 2 AP Physics 1&2 AP Physics C
9 - Academic Biology 10 - Academic Intro to Physics & Chemistry 11 - Honors Chemistry or Academic Chemistry 12 - Honors Physics or Academic Physics OR 9 - Honors Biology 10 - Honors Chemistry 11 - Honors Physics and/or Science Elective(s) 12 - Science Elective(s)	Honors Anatomy & Physiology Honors Environmental Science Honors Astronomy Honors Meteorology Honors Organic Chemistry Honors Physics AP Biology AP Chemistry AP Environmental Science AP Physics 1 AP Physics 2 AP Physics 1&2 AP Physics C

# Social Studies

## Social Studies Required Course Sequence

Four (4) Social Studies credits are required for graduation. Grades 9, 10, and 11 have required courses as listed below. The fourth Social Studies credit can be earned through Social Studies electives.

### Grade 9 - One Credit Required (*One Semester Course From Each Set of Courses*):

American History (IMPACT)*	#1001
Academic American History	#1003
Honors American History	#1005

**AND**

European History (IMPACT)*	#1002
Academic European History	#1004
Honors European History	#1006

### Grade 10 - One Credit Required:

World Cultures (IMPACT)*	#1011
Academic World Cultures	#1012
Honors World Cultures	#1013
AP Human Geography	#1014

\*These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.

### Grade 11 - One Credit Required From One of the Following:

Fundamentals of Modern American History** or Fundamentals of American Government and Law**	#1021/#1022
Academic Modern American History and Politics	#1023
Honors Modern American History and Politics (CHS)	#1024
AP United States History (CHS)	#1025

# Social Studies

## Social Studies Required Course Sequence

### Grade 9, 10, 11, 12 Electives:

Psychology	#1031
Economics	#1032

### Grade 11, 12 Electives:

AP United States History (CHS)	#1025
AP European History (CHS)	#1052
AP Economics	#1051
AP Psychology (CHS)	#1053
AP United States Government and Comparative Politics	#1054
Honors American Foreign Policy: 1945-Present (CHS)	#1041
Honors History of Europe and Russia: 1945-Present (CHS)	#1042
Honors History of East Asia: 1945-Present (CHS)	#1043
Honors Introduction to Philosophy (CHS)	#1044
Law and Justice	#1033
Multicultural Experience (CHS)	#1034
Sociology (CHS)	#1035
Fundamentals of Modern American History or Fundamentals of American Government and Law**	#1021 / #1022

**\*\*These courses are a two-year sequence with each course offered alternating school years. Fundamentals of Modern American History is offered school years finishing in an even number year and Fundamentals of American Government and Law is offered school years finishing in an odd number year.**

**(CHS) Indicates College in High School Course**



## Social Studies

<b><u>CREDIT</u></b>	<b><u>COURSE TITLE</u></b>	<b><u>COURSE #</u></b>	<b><u>OPEN TO GRADES</u></b>
0.5	American History (IMPACT)*	1001	9
0.5	European History (IMPACT)*	1002	9
0.5	Academic American History	1003	9
0.5	Academic European History	1004	9
0.5	Honors American History	1005	9
0.5	Honors European History	1006	9
1.0	World Cultures (IMPACT)*	1011	10
1.0	Academic World Cultures	1012	10
1.0	Honors World Cultures	1013	10
1.0	AP Human Geography	1014	10
1.0	Fundamentals of Modern American History	1021	11,12
1.0	Fundamentals of American Government and Law	1022	11,12
1.0	Academic Modern American History and Politics	1023	11
1.0	Honors Modern American History and Politics (CHS)	1024	11
1.0	AP United States History (CHS)	1025	11
0.5	Psychology	1031	9,10,11,12
0.5	Economics	1032	9,10,11,12
0.5	Law and Justice	1033	11,12
0.5	Multicultural Experience (CHS)	1034	11,12
0.5	Sociology (CHS)	1035	11,12
0.5	Honors American Foreign Policy (CHS)	1041	11,12
0.5	Honors History of Europe and Russia (CHS)	1042	11,12

\* These courses are connected to the IMPACT program and require a specific recommendation through the program coordinator or school counselor.

(CHS) Indicates College in High School Course

## Social Studies

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
0.5	Honors History of East Asia (CHS)	1043	11,12
0.5	Honors Introduction to Philosophy (CHS)	1044	11,12
1.0	AP Economics	1051	11,12
1.0	AP European History (CHS)	1052	12
1.0	AP Psychology (CHS)	1053	11,12
1.0	AP United States Government and Comparative Politics	1054	11,12

**(CHS) Indicates College in High School Course**

## Social Studies

<b>Course Title:</b>	American History (IMPACT)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1001	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>Continuing chronologically from where the 8th grade American History course ended, this American History course develops the major themes of the late 1800s through the mid-1900s. Topics include: Geography (local and national), Immigration, the Rise of Labor, America as a World Power, Prosperity and Depression, and World War II. Emphasis is placed on the development of skills including: note taking, organization, study skills, reading comprehension, and the development of written language skills.</p>		

<b>Course Title:</b>	European History (IMPACT)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1002	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program.</li> </ul>		
	<p>The History of the Western World develops the major themes of the Western World from the 1500s to 1939. Major topics include: The Renaissance, Reformation, Absolutism, French Revolution, Napoleonic Era, Growth of Parliament, Industrialism, Nationalism, World War I, and the Rise of Totalitarianism. Emphasis is placed on the development of skills including: note taking, organization, study skills, reading comprehension, and the development of writing skills while engendering a coherent understanding of the story of the West.</p>		

<b>Course Title:</b>	Academic American History	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1003	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>The focus of this course covers the time period from 1890-1945. After a brief review of Reconstruction and Westward Expansion the course traces our history from Industrialization, Immigration, Progressivism, Imperialism, WWI, the Roaring Twenties, and The Great Depression &amp; New Deal, concluding with a study of the events surrounding WWII. The course connects students with issues in contemporary society by studying their parallels within history. Examples of local and Pennsylvania history are embedded in this course to further enhance this connection.</p>		

## Social Studies

<b>Course Title:</b>	Academic European History	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1004	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>The focus of this course is the History of Western Culture. This course examines the development of European social, economic, and political systems and the geography of the region. Topics covered include: The Middle Ages, Renaissance, Reformation, Absolutism, French Revolution, Napoleonic Era, Growth of Parliament, Industrialism, Nationalism, World War I, and the Rise of Totalitarianism.</p>		

<b>Course Title:</b>	Honors American History	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1005	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 93% in 8th grade Social Studies course</li> </ul>		
	<p>Students enrolled in this course analyze American history from the Second Industrial Revolution through the end of WWII. Major topics include Economics, Industrialization, Immigration, Progressivism, the Roaring Twenties, The New Deal &amp; Great Depression, Imperialism, and WWII. Students will engage in rigorous primary and secondary source readings, historical writing, debate, and the application of historical events and lessons to modern times. As an Honors level course, this course will move at a faster pace and include a more in-depth analysis of the content.</p>		

<b>Course Title:</b>	Honors European History	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1006	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 93% in 8th grade Social Studies course</li> </ul>		
	<p>The 9th Grade Honors European History course focuses on the origins and development of Western Civilization and European Culture from the Middle Ages through 1939, and the evolution of the political, social, religious, and economic institutions in the modern western world. Emphasis is placed on analyzing information, writing essays, and developing research skills. As an Honors level course, this course will move at a faster pace and include a more in-depth analysis of the content.</p>		

## Social Studies

<b>Course Title:</b>	World Cultures (IMPACT)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1011	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>This course is reserved for students who qualify for and are accepted into the IMPACT Program</li> </ul>		
	<p>The course provides a review of geographical skills and economic principles. Students are given an overview of cultures from around the world. A multi-disciplinary approach that stresses geography, history, economics, and government is used to explore Africa, the Middle East, Asia, and Latin America. Students will develop critical thinking skills through the analysis of primary documents and articles relating to contemporary and global issues and their impact.</p>		

<b>Course Title:</b>	Academic World Cultures	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1012	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course utilizes the five themes of geography to provide a framework for a comparative study of cultures around the world. Geography, mapping skills, and economic principles are emphasized throughout the course. The areas of Africa, the Middle East, Southeast Asia, East Asia, and Latin America are explored through a multi-disciplinary approach. Students will advance their critical thinking skills through the analysis of primary documents and articles relating to contemporary and global issues and their impact.</p>		

<b>Course Title:</b>	Honors World Cultures	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1013	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 83% in Honors American History and Honors European History OR</li> <li>Minimum of 93% in Academic American History and Academic European History AND</li> <li>Minimum of 83% in Honors English 1 or 90% in Academic English 1.</li> </ul>		
	<p>Students in this course will examine current world events and investigate a variety of contemporary global issues. The course curriculum will focus on the regions of East and South Asia, the Middle East, and Europe with an emphasis on their history, current economic and political issues, and relationship with the United States. Course work will involve high level reading and writing assignments, extensive research on a variety of topics, and the development of analytical skills.</p>		

## Social Studies

<b>Course Title:</b>	AP Human Geography	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1014	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum of 90% in Honors American History and Honors European History OR</li> <li>• Minimum of 95% in Academic American History and Academic European History AND</li> <li>• Minimum of 90% in Honors English 1 or 95% in Academic English 1</li> </ul>		
	<p>This year-long course is the equivalent of a semester introductory college course in Human Geography and is intended for top-performing 10th graders with advanced reading, writing, and analytic skills. The purpose of this course is to become more geoliterate, more engaged in contemporary global issues, and more informed about the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface, including multicultural viewpoints. Students learn to employ spatial concepts and landscape analysis to examine economic, cultural, political, and urban geography as it applies to the modern global world. Students will develop skills in approaching problems geographically, using maps and geospatial technologies, thinking critically about texts and graphic images, interpreting cultural landscapes, and applying geographic concepts such as scale, region, diffusion, interdependence, and spatial interaction, among others. As a college level course, this course requires a substantial time commitment from the student and a demonstrated ability of the student to complete advanced reading and writing assignments independently.</p>		

<b>Course Title:</b>	Fundamentals of Modern American History	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1021	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Students must be recommended for this course by their School Counselor and the IMPACT team.</li> </ul>		
	<p>This course is designed to support the needs of 11th and 12th grade students with reading and writing difficulties and is the companion course to Fundamentals of American Government and Law. Students study Contemporary American Culture by examining the history of our nation from the end of World War II through the present. Basic social and economic principles are examined in connection with the main events of this period of U.S. history. The primary focus of the course is to assist the student in building and strengthening their reading, writing, listening, speaking, and study skills.</p>		

## Social Studies

<b>Course Title:</b>	Fundamentals of American Government and Law	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1022	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Students must be recommended for this course by their School Counselor and the IMPACT team.</li> </ul>		
	<p>This course is designed to support the needs of 11th and 12th grade students with reading and writing difficulties and is the companion course to Fundamentals of American Government and Law. Students study Contemporary American Culture by examining the history of our nation from the end of World War II through the present. Basic social and economic principles are examined in connection with the main events of this period of U.S. history. The primary focus of the course is to assist the student in building and strengthening their reading, writing, listening, speaking, and study skills.</p>		

<b>Course Title:</b>	Academic Modern American History and Politics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1023	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This full year course is the final phase of the American History and Government program. The course covers the time period from 1945 to the present and explores the domestic and foreign policies of each administration and their impact on the citizenry of the United States and on the world. This is a required interdisciplinary study emphasizing critical analytical skills, discussion skills, in-depth reading skills, and writing skills. This course also examines in detail the political system of the United States including its history, traditions, values, and institutional framework. Students will utilize readings and case studies to analyze public opinion, political parties, voting patterns, and interest group behavior in our political process.</p>		

<b>Course Title:</b>	Honors Modern American History and Politics (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1024	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 83% in AP Human Geography or Honors World Cultures OR</li> <li>Minimum of 93% in Academic World Cultures.</li> </ul>		
	<p>This Honors course is the final phase of the Modern American History and Government program. The course is an in-depth study of the time period from 1945 to the present and explores the domestic and foreign policies of each administration and their impact on the citizenry of the United States and the impact on the world. This course emphasizes critical analytical skills, discussion skills, and requires advanced reading and writing abilities. This course also examines in detail the political system of the United States – its history, traditions, values, and institutional framework. Students will utilize readings and case studies to analyze public opinion, political parties, voting patterns, and interest group behavior in our political process.</p>		

## Social Studies

<b>Course Title:</b>	AP United States History (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1025	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum QPA of 3.5</li> <li>• Minimum of 83% in AP Human Geography or 93% in Honors World Cultures</li> </ul>		
	<p>The Advanced Placement United States History course provides an in-depth study of the major social, economic, political, and technological forces at work in American history. The course is designed to mirror the content and difficulty that can be expected in a typical college survey course of United States History. Much reading, discussion, analytical thinking, and evaluation are required and students will work independently to moderate lessons within the classroom.</p>		

<b>Course Title:</b>	Psychology	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1031	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>Psychology examines the complex nature of the human mind and behavior. Major areas of concentration include: psychological models, states of consciousness, learning, personality, and the causes/treatment of abnormal behavior. A variety of assignments and activities are used to enhance the students' comprehension of important concepts and theories.</p>		

<b>Course Title:</b>	Economics	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1032	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>This course begins with an introduction to key microeconomic principles: the functioning of the free market economic system, the interaction between supply and demand, and market failures such as externalities. The course concludes with an examination of macroeconomic concepts. Students will learn how measurements of GDP, unemployment and inflation are used to gauge the health of the economy. In addition, theories of fiscal and monetary policy will be addressed.</p>		



## Social Studies

<b>Course Title:</b>	Law and Justice	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1033	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Law and Justice provides practical information and problem-solving opportunities that develop in students the knowledge and skills necessary for survival in our legal society. A variety of films, role-plays, mock trials, and small group exercises are utilized. The course includes a visit to a criminal court and a juvenile detention center.</p>		

<b>Course Title:</b>	Multicultural Experience (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1034	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed to promote a holistic understanding of the richness that multicultural differences offer including an exploration of different cultural perspectives and customs. A historical to present day view of biases, prejudices, and stereotypes will be analyzed. Students will experience local multicultural activities and access local community resources. The focus on the pluralistic nature of the U.S., in conjunction with its free political system will enable students to understand that the United States has special significance to the rest of the world. The richness of the course content will develop a sense of global connectedness, unity, and sameness of all people.</p>		

<b>Course Title:</b>	Sociology (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1035	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Sociology is the study of culture, society, and groups within a society. Students will learn about the causes and effects of contemporary social problems confronting society. Through discussions of basic sociological concepts, students will see how human beings become social creatures and how they establish patterns of behavior that make society work.</p>		

## Social Studies

<b>Course Title:</b>	Honors American Foreign Policy (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1041	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Honors American Foreign Policy: 1945-Present is an honors level course designed to provide the college bound student with training in the critical analysis, problem-solving, and decision-making skills necessary for lifelong learning. In addition, the course presents extensive background and analysis of factual data related to recent American foreign policy to enable modern citizens to develop informed views about current international issues.</p>		

<b>Course Title:</b>	Honors History of Europe and Russia (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1042	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>The major emphasis of this course is placed on key historical problems facing Europe and Russia in the period following World War II including: the reconstruction following World War II, the Cold War, political and economic rivalry between Russia and the Eastern Bloc versus Western Europe and the United States 1945-1953. It covers the peaceful coexistence and brinkmanship 1953-1969, détente and improving relations between Eastern and Western Europe 1969-1980, the final decline of communism ending with its collapse in Europe 1981-1992. There is an examination of Western European unity, the political and economic relationships among the European nations, and a comparative study of the democratic parliamentary systems in Western Europe. The Soviet System in Eastern Europe and the evolutionary development of the economic and political systems in Russia and Eastern Europe 1989-present are reviewed. There is an emphasis on the new age of a global economy and interdependence.</p>		

<b>Course Title:</b>	Honors History of East Asia (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1043	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This one-semester survey course covers the historical problems and developments of modern East Asia with an emphasis on the histories of Japan, North and South Korea, China, and Taiwan. The course will examine current political, democratic, and communist experiences of the region and analyze the role of the U.S. in East Asia and the cultural impact of U.S. and East Asian relations.</p>		

## Social Studies

<b>Course Title:</b>	Honors Introduction to Philosophy (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1044	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Honors Introduction to Philosophy is an introduction to philosophical reflection and examination of some central questions of human existence. Throughout this course, students will consider: 1) epistemological questions concerning the possibility and nature of knowledge and truth.; 2) metaphysical questions concerning the nature of ultimate reality, the mind-body problem, consciousness, freedom and determinism, personal identity, and the existence of God; and the existence of God; and 3) ethical questions concerning morality and the good life. Honors Philosophy is largely discussion-based and will place an emphasis on the careful reading of primary and secondary sources, critical and systematic thinking, and the verbal and written expression of ideas.</p>		

<b>Course Title:</b>	AP Economics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1051	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum QPA of 3.5</li> <li>Minimum of 83% in an Honors or AP level social studies course the previous year</li> <li>Enrollment in this AP elective course is limited to 11th and 12th grade students only</li> </ul>		
	<p>The Advanced Placement Economics course encompasses a college-level study of both Microeconomics and Macroeconomics. The Microeconomics portion will provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. The Macroeconomics portion of the course provides a thorough understanding of the principles of economics that apply to an economic system. It places particular emphasis on the study of national income and price determination, and develops familiarity with economic performance measures, economic growth, and international economics.</p>		

<b>Course Title:</b>	AP European History (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1052	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum QPA of 3.5</li> <li>Minimum of 83% in an Honors or AP level social studies course the previous year</li> <li>Enrollment in this AP elective course is limited to 12th grade students only</li> </ul>		
	<p>This elective course offers a comprehensive view of European History from the Renaissance (1350) to present day. This challenging, college-level course demands a high level of analytical thinking, class discussion of primary sources, and frequent writing assignments. Major areas of study include politics, economics, and diplomacy, as well as special emphasis on the arts, philosophy, and culture. It is highly recommended that a student successfully complete AP United States History prior to taking this course.</p>		

## Social Studies

<b>Course Title:</b>	AP Psychology (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1053	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum QPA of 3.5</li> <li>• Minimum of 83% in an Honors or AP level social studies course the previous year</li> <li>• Enrollment in this AP elective course is limited to 11th and 12th grade students only</li> </ul>		
	<p>The Advanced Placement course in Psychology is a college-level introduction to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethical standards and methodology psychologists use in their science and practice. This course will be similar in design, content, and difficulty to a college survey course in Psychology.</p>		

<b>Course Title:</b>	AP United States Government and Comparative Politics	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1054	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Minimum QPA of 3.5</li> <li>• Minimum of 83% in an Honors or AP level social studies course the previous year</li> <li>• Enrollment in this AP elective course is limited to 11th and 12th grade students only</li> </ul>		
	<p>The AP American Government and Comparative Politics course encompasses a college-level study of both U.S. government and politics and comparative government and politics. The AP US Government and Politics portion of the course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. The AP Comparative Government and Politics portion of the course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.</p>		

## Technology and Engineering Education

<b><u>CREDIT</u></b>	<b><u>COURSE TITLE</u></b>	<b><u>COURSE #</u></b>	<b><u>OPEN TO GRADES</u></b>
1.0	Honors Principles of Engineering PLTW (CHS)	1272	9,10,11,12
1.0	Honors Introduction to Engineering Design PLTW (CHS)	1271	9,10,11,12
1.0	Honors Digital Electronics PLTW (CHS)	1273	9,10,11,12
1.0	Honors Engineering Capstone PLTW	1275	11,12
0.5	Exploring CADD (Computer Aided Drawing/Design)	1251	9,10,11,12
1.0	Advanced CADD (Computer Aided Drawing/ Design)	1252	11,12
1.0	Wood and Metal Fabrication	1223	11,12
0.5	Wood and Metal Fabrication (Sem/FT)	1224	11,12
1.0	Stage Technology and Production	1261	11,12
1.0	Advanced Stage Technology and Production	1262	11,12
0.5	Home Maintenance and Repair	1225	11,12
0.5	Emerging Technologies	1232	11,12
0.5	Creation and Innovation	1242	11,12
0.5	Manufacturing 1	1221	9,10
0.5	Manufacturing 2	1222	9,10
0.5	Exploring Emerging Technologies	1231	9,10
0.5	Exploring Robotic Engineering	1201	9,10,11,12
0.5	Robotic Engineering	1202	9,10,11,12
1.0	Advanced Robotic Engineering	1203	11,12
0.5	Electricity and Electronics	1226	9,10
0.5	Game Development	1211	9,10,11,12
0.5	Advanced Game Development	1212	9,10,11,12
0.5	Exploring Creation and Innovation	1241	9,10
1.0	Honors Civil Engineering and Architecture PLTW (CHS)	1274	11,12

**(CHS) Indicates College in High School Course**

## Technology and Engineering Education

<b>Course Title:</b>	Honors Principles of Engineering PLTW (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1272	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of, or concurrently enrolled in Honors Introduction to Engineering Design PLTW (CHS)</li> </ul>		
	<p>Honors Principles of Engineering (POE) exposes students to some of the major concepts that they will encounter in a postsecondary engineering course. Through problems that engage and challenge, students explore a broad range of engineering topics including mechanisms, electrical systems, thermodynamics, the strength of materials and structures, automation, robotics, and motion. Students have the opportunity to develop skills and understand course concepts through activity, project, and problem-based learning. Activities and projects include, but not limited to, an automated sorter, a projectile launcher, various electrical circuits, and material testing methods. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.</p> <p>This course is eligible for college credit through Rochester Institute of Technology (RIT) and other colleges and universities that can be found at the Project Lead the Way (PLTW) student opportunities page <a href="https://www.pltw.org/experience-pltw/student-opportunities">https://www.pltw.org/experience-pltw/student-opportunities</a>.</p>		

<b>Course Title:</b>	Honors Introduction to Engineering Design PLTW (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1271	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>In Honors Introduction to Engineering Design (IED) students are introduced to the engineering profession and methods used to approach solutions to engineering problems. The course will utilize activity, project, and problem-based teaching with a major emphasis on the design process. Students will progress from completing structured activities to solving open-ended projects and problems that require them to develop planning, documentation, communication, teamwork and other professional skills. Students will develop skills in technical representation and documentation of design solutions according to accepted technical standards and will use current 3D modeling software, digital fabrication, and 3D printing to represent and communicate solutions.</p> <p>This course is eligible for college credit through Rochester Institute of Technology (RIT) and other colleges and universities that can be found at the Project Lead the Way student opportunities page <a href="https://www.pltw.org/experience-pltw/student-opportunities">https://www.pltw.org/experience-pltw/student-opportunities</a></p>		

## Technology and Engineering Education

<b>Course Title:</b>	Honors Digital Electronics PLTW (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1273	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of, or concurrently enrolled in Honors Introduction to Engineering Design PLTW (CHS)</li> </ul>		
	<p>Honors Digital Electronics (DE) is the study of electronic circuits that are used to process and control digital signals. Digital electronics allows for greater signal speed and storage capabilities and has revolutionized the world of electronics. The major focus of this course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity, project, and problem-based teaching and learning pedagogy, students will analyze, design, and build digital electronic circuits. While implementing these designs, students will continually hone their professional skills, creative abilities, and understanding of the circuit design process. This course is eligible for college credit through Rochester Institute of Technology (RIT) and other colleges and universities that can be found at the Project Lead the Way (PLTW) student opportunities page <a href="https://www.pltw.org/experience-pltw/student-opportunities">https://www.pltw.org/experience-pltw/student-opportunities</a>.</p>		

<b>Course Title:</b>	Honors Engineering Capstone PLTW	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1275	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of, or concurrently enrolled in Honors Introduction to Engineering Design PLTW (CHS)</li> </ul>		
	<p>Honors Engineering Capstone is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. Students will conduct research to select, define, and justify a problem. After carefully defining the design requirements, teams of students will create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and continually hone their organizational skills, interpersonal skills, and their creative and problem-solving abilities. Key concepts covered in this course include, but not limited to, project management, documentation, teamwork, intellectual property management, prototyping, and evaluating and presenting a project.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Exploring CADD (Computer Aided Drawing/Design)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1251	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is an introduction to drafting and design for students interested in learning how CADD is utilized to communicate technical information related to the engineering field. Autodesk software will be utilized on the PC platform. Programs used will include AutoCAD, Inventor, Fusion 360, and Revit. Students will be given opportunities to utilize laser engravers, 3-D printers, and other mediums. Students will learn techniques of drawing, dimensioning, modeling, and prototyping. Areas of engineering addressed will include mechanical, architectural, and structural. Both 2-D and 3-D modeling will be taught including, but not limited to rendering (color and shading of drawings). Students will learn about the materials used in manufacturing, the machines and methods of manufacturing, and related careers.</p>		

<b>Course Title:</b>	Advanced CADD (Computer Aided Drawing/Design)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1252	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Exploring CADD (Computer Aided Drawing/Design)</li> </ul>		
	<p>This course is designed for students who already are familiar with CADD software. This course involves the development of advanced drafting techniques. Areas of study include, but not limited to, surface development, modeling, and design through the creation of mechanical, structural, and architectural drawings. Advanced 3-D modeling techniques will be used and animations will be generated from the CADD files. Portfolio development through drafting, 3-D printing, and laser engraving will be explored within the course. Autodesk products that will be used include AutoCAD, Inventor, Revit, and Fusion 360.</p>		

<b>Course Title:</b>	Wood and Metal Fabrication	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1223	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This full-year course provides an opportunity to improve and advance knowledge and skills in using a variety of materials and processes. Although wood is the primary material for the course, metals are explored and can be utilized in the student's engineered projects. Students will design, produce, and test products that will improve their skills, understanding, and knowledge of material processes and systems related to solving problems applying Mathematical and Science principles. More advanced techniques in the use of machines, tools, manufacturing processes, and finishing procedures related to various materials will be included. Careers to which this study could lead include all types of manufacturing, engineering, construction, materials design, cabinetmaking, and carpentry.</p>		



## Technology and Engineering Education

<b>Course Title:</b>	Wood and Metal Fabrication (Sem/FT)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1224	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	This course is the semester version of course number 1223.		

<b>Course Title:</b>	Stage Technology and Production	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1261	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course will cover the principles and techniques of stagecraft, including stage terminology, theater architecture, scenic construction, set painting, tool and machine use, set materials, and production organization. Implementation of lighting design including reading a light plot, hanging a show, utilizing lighting instruments, programming computer light boards, programming computer sound boards, and utilizing color theory. Ultimately, all efforts will be centered toward the creation of a functional space, mood, and style for each school production.</p>		

<b>Course Title:</b>	Advanced Stage Technology and Production	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1262	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Stage Technology &amp; Production</li> </ul>		
	<p>This course will cover advanced principles, techniques, and technologies of stagecraft. Students will be responsible for creating plans for Lighting Design, Sound Design, Set Construction, and Stage Management for three school productions. A deep understanding of sound design, sound board operation, lighting design, and light board operation will be applied to each of the productions. Students will be working directly with show directors in a collaborative environment to bring the director's vision to life.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Home Maintenance and Repair	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1225	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course provides students with the opportunity to explore the many different areas and fundamental systems related to home maintenance, repair, and ownership. Through hands-on problem-solving, students will learn and practice many different home repair procedures and techniques including, but not limited to, masonry, systems (e.g., electrical, plumbing, heating), roofing, and interior/exterior finishing. Architectural plans, building codes, permits, specifications, and material estimating will also be addressed throughout this course. Students will learn these practical maintenance and home improvement skills that apply to both future homeowners and those interested in pursuing careers in architecture, construction, and building trades.</p>		

<b>Course Title:</b>	Emerging Technologies	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1232	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11-12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course will allow students to design and build solutions to technological problems. Students will develop problem-solving skills while designing and physically creating solutions to problems based on the PA State Standards.</p> <p>Many of the problems will replicate ones that engineers are faced with. This course is designed to be the hands-on application of many academic disciplines such as mathematics, science, physics, history, and language arts.</p>		

<b>Course Title:</b>	Creation and Innovation	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1242	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Creation and Innovation is a course where students apply critical thinking and creativity through the use of the design process and digital fabrication. Using the latest technology tools and software including 3D printers, laser engravers, CNC routers, vinyl printer/cutter machines, and programmable devices, students will analyze current innovations and trends to create improvements upon them. Students will also have the opportunity to design and create their own projects based on previous activities and teacher input. These projects could include, but not limited to, vinyl wall art, custom 3D printed models, personalized engraved items, t-shirts, and jewelry. STEM concepts will be addressed throughout as students are exposed to and become active members of the “Maker” movement.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Manufacturing 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1221	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Newer technologies related to manufacturing will be incorporated into the development and construction of woodworking products. The use of CADD (Computer Aided Drawing and Design) software, CNC (Computer Numerical Controlled) Routers and Laser Engravers will be used to add individual design to assigned activities. The focus of this hands-on course will be to gain a fundamental understanding of wood, woodworking machines, automated machines, and hand tools. The safe operation of machinery, power and hand tools will also be discussed. Students will be introduced to the materials, drawings, and tools used in the manufacturing of individual products. Students will become familiar with jigs and fixtures as a way to create quality products.</p>		

<b>Course Title:</b>	Manufacturing 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1222	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Manufacturing 1</li> </ul>		
	<p>Advanced use of CADD (Computer Aided Drawing and Design) software, a CNC (Computer Numerical Controlled) Router, Laser Engraver, and 3-D printer will be used in the design and development of individual products. This course continues the study of wood, woodworking machines, automated machines, and hand tools, but at an advanced level. Students become more independent in the development, design, and engineering of class products.</p>		

<b>Course Title:</b>	Exploring Emerging Technologies	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1231	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>In this course, students will develop solutions to given situations using problem-solving models. Activities will utilize STEM related concepts combined with the operation of automated machines in order to create prototypes and solutions. Students will research, design, prototype, manufacture, and test products that they have created themselves. Students will discover how to apply engineering design, scientific principles, and engineering analysis to solve real world problems. Problems will be based on the PA State Standards for Technology and Engineering Education. Individual and group work will be emphasized through the problem-solving process. The class will prepare students for the challenges of today and the future's dynamic world by promoting technological literacy, leadership, and problem-solving skills.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Exploring Robotic Engineering	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1201	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Students will acquire a basic understanding of types of robots, how they operate, and their application in the real world. This hands-on, project-based course introduces students to the generations of robots through a unique curriculum collaboration with Carnegie Mellon Robotics Academy. Classroom and lab activities will include assembling and operating robotic systems, building using VEX Robotics, and programming robots and automated systems with VEXcode. Furthermore, students will design and build various robots and use computational thinking practices to solve problems and complete challenges. Students will design and produce custom robotic components utilizing a laser engraver and a 3-D printer. STEM concepts will be addressed throughout the course.</p>		

<b>Course Title:</b>	Robotic Engineering	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1202	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Exploring Robotic Engineering</li> </ul>		
	<p>Robotic Engineering will provide students the opportunity to continue the study of robots and automated systems gained through work in the previous course. Classroom and lab activities will include building and programming mobile robots using the VEX V5 system, using programmable logic controllers to control pneumatic/mechanical systems, and exploring robots used in manufacturing, product development, testing, and amusement. Students will also experience programming with vision sensors and remote controls. Students will use this knowledge along with the design process to create custom robots that will prepare them for challenges and competitions.</p>		

<b>Course Title:</b>	Advanced Robotic Engineering	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1203	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Exploring Robotic Engineering and/or Robotics Engineering</li> </ul>		
	<p>Students will capstone a STEM journey with robotics in this course. Students will continue exposure to robotics and coding through use of the VEX V5 system and VEXcode software. Designing custom robots for competition and developing solutions to real-world problems will be the focus of this course. Students will develop team-driven, job specific (e.g., programmers, fabricators, and marketers) robotic projects based on problems presented by industry, experts, and organizations. Projects may also include the use of mechatronic components and concepts, material processing, CNC operation, and 3D printing. Additionally, students will explore career opportunities, employer expectations, and educational needs in the robotics industry.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Electricity and Electronics	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1226	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is an introduction to electricity and electronics designed for students interested in learning how electricity can be safe and exciting. Students learn about electronic components and how they are used to design and assemble various circuits. Students will also complete various projects that will enhance their understanding of electronic design. Soldering wires and components, crimping connections, using digital multimeters, and operating power supplies for testing circuits are just a few of the hands-on activities in this course. How electricity is used in the home will be explored through residential wiring, electrical planning, and concepts of the smart home. Students will also be exposed to programmed circuits and mechatronics through individual projects using the Arduino and Raspberry Pi. STEM concepts will be addressed throughout the course.</p>		

<b>Course Title:</b>	Game Development	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1211	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Game Development is a game design course and much more. Technical skills such as programming, graphic design, animation, testing and debugging will be taught in this course. Skills acquired will be transferable to other STEM career paths. Game Development will begin with event driven programming and advance to more complex projects that involve writing texted-based code. The engineering problem-solving cycle plays a large role with integrating physics and mathematical principles into game functionality. After you have learned how to develop and program a game, you will investigate how to market an original game idea.</p>		

<b>Course Title:</b>	Advanced Game Development	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1212	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Game Development</li> </ul>		
	<p>Advanced Game Development will expand upon the principles of two-dimensional game design learned in Game Development and introduce students to the principles of three-dimensional modeling and animation for game development. Topics will include modeling, animating, lighting, camera angles, and texturing. Through the use of a game engine, students will implement controls, physics, collision detection, sound, animation, and memory management. Students will use C# programming language, the Unity 3-D editor, and many of the concepts that are used in successful game design. Students will also become familiar with elements of game play and project management concepts, as related to video games. Students will utilize STEM skills as they apply the design process to the creation of their own games.</p>		

## Technology and Engineering Education

<b>Course Title:</b>	Exploring Creation and Innovation	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1241	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Exploring Creation and Innovation is an emerging course where students apply critical thinking and creativity through the use of the design process and digital fabrication. Using the latest technology tools and software including 3D printers, laser engravers, CNC routers, vinyl printer/cutter machines, and programmable devices, students will analyze current innovations and trends to create improvements upon them. Students will also have the opportunity to design and create their own projects based on previous activities and teacher input. These projects could include, but not limited to, vinyl wall art, custom 3D printed models, personalized engraved items, t-shirts, and jewelry. STEM concepts will be addressed throughout as students are exposed to and become active members of the “Maker” movement.</p>		

<b>Course Title:</b>	Honors Civil Engineering and Architecture PLTW (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1274	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of, or concurrently enrolled in Honors Introduction to Engineering Design (CHS)</li> </ul>		
	<p>Honors Civil Engineering and Architecture (CEA) is a specialized high school level course that deepens the skills and knowledge of students interested in pursuing a career in architecture, civil, and similar areas of engineering. In CEA students are introduced to important aspects of building and site design and development. Students will apply mathematics, science, and standard engineering practices to design both residential and commercial projects and document their work using a 3-D architectural design software Autodesk Revit. Students will also learn how to document their work and communicate their projects to their peers and members of the professional community.</p> <p>This course is eligible for college credit through Rochester Institute of Technology (RIT) and other colleges and universities that can be found at the Project Lead the Way (PLTW) student opportunities page <a href="https://www.pltw.org/experience-pltw/student-opportunities">https://www.pltw.org/experience-pltw/student-opportunities</a>.</p>		

## Visual Arts

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
0.5	Drawing and Painting 1	1301	9,10
0.5	Drawing and Painting 2	1302	9,10
1.0	Drawing and Painting 3	1303	10
0.5	Arts and Crafts	1311	9,10
0.5	Introduction to Pottery and Sculpture	1312	9,10
0.5	Digital Imaging and Media Arts	1321	9,10
1.0	AP Art History (CHS)	1381	10
0.5	Drawing and Design Concepts	1331	11,12
0.5	Painting and Color Concepts	1332	11,12
0.5	Pottery 1	1341	11,12
0.5	Pottery 2	1342	11,12
0.5	Sculpture	1351	11,12
0.5	Jewelry and Metalsmithing	1352	11,12
0.5	Graphic Design and Digital Illustration	1361	11,12
0.5	Photography 1	1371	11,12
0.5	Photography 2 (CHS)	1372	11,12
1.0	Honors Art (CHS)	1391	11,12
1.0	AP Art Design (CHS) (Drawing, 2D Design, or 3D Design)	1399	12
0.5	Computer Multimedia Arts	0806	11,12
0.5	Advanced Computer Multimedia Arts	0807	11,12

**(CHS) Indicates College in High School Course**

## Visual Arts

<b>Course Title:</b>	Drawing and Painting 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1301	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Drawing and Painting 1 is a basic course that introduces a wide variety of media and techniques. Included in the course are topics in design and composition in areas such as painting, drawing, cartooning, and work in the sketchbook. Students will be encouraged to work creatively and to become competent in the use of different materials and basic processes.</p>		

<b>Course Title:</b>	Drawing and Painting 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1302	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Drawing and Painting 2 a more advanced study of drawing and painting. There are no prerequisites; however, Drawing and Painting 1 is recommended. Students work in an expanded range of two-dimensional media. There will be concentration in areas of more advanced drawing, watercolor and acrylic painting, mixed media, graphic design, digital media, and printmaking, as well as work in the artist's own personal sketchbook.</p>		

<b>Course Title:</b>	Drawing and Painting 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1303	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of one or more semester-level Visual Arts courses in 9th grade</li> <li>OR</li> <li>Approval from a high school art teacher</li> </ul>		
	<p>Drawing and Painting 3 is a full year/full time course designed for those who wish to concentrate in specialized areas of interest. A high degree of personal involvement and responsibility for developing ideas and finished work will be stressed. Classwork will include an emphasis on more advanced drawing and painting, watercolor, acrylic and oil painting, graphic design, digital media, printmaking, and work in the sketchbook.</p>		



## Visual Arts

<b>Course Title:</b>	Arts and Crafts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1311	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed for students who like to work in many different artistic areas to discover interests and abilities for further study. Students learn the primary skills of many visual art processes as well as design and creative strategies. Most of the work produced in this class is intended for use as functional objects as well as works of art, and a variety of artistic media are used to develop artistic concepts. Some of the activities in the course include: etching on mirrors, hand-wrought metalwork and jewelry, hand-built pottery, tie-dye t-shirt design, sculpture, decoupage, pewter-casting, and fresco painting.</p>		

<b>Course Title:</b>	Introduction to Pottery and Sculpture	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1312	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This course is designed to provide students with the opportunity to explore methods of artistic expression through studies in pottery and three-dimensional art making. Study will include a nine-week concentration in pottery work with experiences on the pottery wheel, hand-building pottery, and glazing. The other half of the semester is devoted to the creation of sculptures while exploring a variety of media including clay, plaster, metal, wood, glass, and plastic. Within each unit of study, various artists and artistic styles will be covered as well as different sculptural techniques and surface renderings. Some of these techniques will include: under and over glazing, marbleizing clay, mishima, and traditional patina finishes.</p>		

<b>Course Title:</b>	Digital Imaging and Media Arts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1321	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	9, 10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Digital Imaging and Media Arts introduces students to creating original creative work using computers and digital media. Topics will include the design and production of digital imagery, graphics and photography, animation, video, multimedia, interactive design, and game design. Students will learn to use industry-standard creative software, such as Adobe Photoshop, Premiere Pro, and After Effects, to explore techniques, genres, and styles relating to graphic and web design, commercial advertising, and the fine arts.</p>		

## Visual Arts

<b>Course Title:</b>	AP Art History (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1381	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	10	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Advanced Placement (AP) Art History offers a unique, in-depth perspective into our world's rich and diverse cultural heritage through study of art and architectural works across cultures and time periods, and is designed to engage students at the same level as an introductory college art history survey. Art History emphasizes visual analysis to understand how and why works of art function in their historical context. Throughout the year, students will examine issues such as politics, religion, patronage, gender, function, and ethnicity as they relate to creative works. Global and thematic connections will be made through the cross-cultural comparison of art. Students will engage with the history of art through a combination of discussion, research, museum visits, projects, and hands-on studio experiences. The course curriculum is intended to prepare students for the AP Art History exam, which students are encouraged, but not required, to take.</p>		

<b>Course Title:</b>	Drawing and Design Concepts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1331	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>All levels of artistic ability and experience are welcome in this semester course. In Drawing and Design Concepts, students will learn to utilize various drawing media and techniques, including graphite, marker, pen ink, color pencil, charcoal, pastel, and mixed media. Students will explore various subject matters including still life, landscape, portraiture, and abstraction while learning to visually express concepts and ideas in their artwork. Learning to use value, color, and other visual elements will enable students to compose well-designed drawings and artworks while exploring their own artistic style. Through individual and group discussions of artwork, students will learn to refine and revise their artwork to grow from their initial artistic abilities.</p>		

<b>Course Title:</b>	Painting and Color Concepts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1332	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>All levels of artistic ability and experience are welcome in this semester course. In Painting and Color Concepts, students will learn to utilize various painting media and techniques, including acrylic, water mixable oils, watercolor, and mixed media. Students will explore various subject matters including still life, landscape, portraiture, and abstraction while learning to visually express concepts and ideas in their artwork. Learning to use color, light, and other visual elements will enable students to compose well-designed paintings and artworks while exploring their own artistic style. Through Individual and group discussions of artwork, students will learn to refine and revise their artwork to grow from their initial artistic abilities.</p>		

## Visual Arts

<b>Course Title:</b>	Pottery 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1341	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Pottery 1 is an entry-level course, designed to offer students instruction in the aesthetics, techniques, and history of pottery. The class is primarily performance-based, and students are expected to actively participate in class every day. Practice is essential to acquiring the skill necessary to form pottery. Students will learn various forming methods such as coil, slab, and the potter's wheel. Emphasis will be placed on craftsmanship, proper technique, glazing, and decorating. Pottery is a labor-intensive class; however, there is very little book work. Information is presented in lecture and hands-on demonstrations during class. No previous experience is necessary.</p>		

<b>Course Title:</b>	Pottery 2	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1342	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Successful completion of Pottery 1 at NASH</li> <li>OR</li> <li>Approval from a high school art teacher</li> </ul>		
	<p>Pottery 2 is a class designed for students who are interested in a more in-depth clay experience. Emphasis will be placed on refining basic skills to produce work that is more complex and mature. A variety of glazing/decorating techniques will be explored. In addition, the study of ceramic history will include a focus on contemporary artists.</p>		

<b>Course Title:</b>	Sculpture	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1351	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>This class will provide students with the opportunity to creatively express their thoughts and ideas in a three-dimensional form. Students will explore the processes of mold-making, casting, head modeling, reductive carving, and assemblage while utilizing a variety of materials including clay, plaster, wood, and found objects. Emphasis will be placed on handling the materials, craftsmanship, and creative solutions to assigned projects. No previous experience is necessary.</p>		

## Visual Arts

<b>Course Title:</b>	Jewelry and Metalsmithing	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1352	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Students will be taught both basic and advanced techniques of jewelry making, including processes of fabrication, photo etching, “lost wax” casting, stone setting, enameling, and glass casting. As students create projects such as rings, earrings, neckpieces, and ornaments, the emphasis will be on design and how to design successfully. Materials used will include: copper, nu-gold, nickel silver, contemporary plastic, and glass. Students have the option to purchase precious metals and gemstones to incorporate into their work.</p>		

<b>Course Title:</b>	Graphic Design and Digital Illustration	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1361	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Graphic Design and Digital Illustration introduces students to using visual communication skills and creating original graphical work in line with creative professions, like graphic design, comic and game-style illustration, and animation. Students will learn drawing and design skills using industry-standard computer hardware and digital applications, such as Adobe Photoshop and Adobe Illustrator. Design and Illustration fundamentals are introduced through experience with logo and wordmark creation, typography and image, vector graphics, print and web design, branding, digital drawing and painting, sequential art, and animation. Individual and group discussions of your artwork will help to take work to the next level. No previous experience is necessary.</p>		

<b>Course Title:</b>	Photography 1	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1371	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Want to learn how to take amazing photographs with your smartphone or digital camera and stop relying on filters? Then, this is the course for you. All levels of artistic ability and experience are welcome. Subjects like portrait, landscape, abstract, and digital collage will be explored with an emphasis on creativity. Students will learn how to edit and enhance photos with Adobe Lightroom and Photoshop. Analog photography will also be explored. Photography is a skill you will use the rest of your life. Learn how to take incredible photographs and be the envy of your friends on social media.</p>		

## Visual Arts

<b>Course Title:</b>	Photography 2 (CHS)	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	1372	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Successful completion of Photography 1 with a 'B' average or higher</li> </ul>		
	<p>Photography 2 will provide students with an opportunity to further develop and build upon the skills learned in Photography 1. Students will explore advanced film and digital shooting techniques including multiple exposure, long exposure, painting with light, time lapse, studio lighting, and high dynamic range (HDR) imaging. Advanced darkroom techniques including combination printing and alternative chemistry will also be explored. Students will also expand upon their knowledge of digital image editing with more advanced techniques. All film, chemicals, and darkroom equipment are provided.</p>		

<b>Course Title:</b>	Honors Art (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1391	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• A' or 'B' average in Drawing and Painting 1, 2, or 3</li> <li>• OR 'A' or 'B' average in at least three sections of semester art courses</li> <li>• OR Approval from a high school art teacher</li> </ul>		
	<p>Honors Art is a studio course that will challenge students to develop a higher level of visual aesthetic expression, through both 2D and 3D art mediums, including drawing, painting, printmaking, digital media, and sculpture. Students will develop their own creative artistic expression through the use of visual journals, technical exercises, art production, critiques, and a variety of creative thinking strategies. Honors Art provides students with the opportunity to develop a portfolio of diverse artwork in preparation for the AP Art &amp; Design course and/or a college portfolio submission. Students can potentially earn college credit through the La Roche University Scholar Program with the successful completion and passing of Honors Art. Students will learn how to innovate new ideas, research and implement cross-disciplinary subjects, navigate obstacles, manage projects, and experiment, as well as take risks helping to prepare students for any career.</p>		

## Visual Arts

<b>Course Title:</b>	AP Art and Design (CHS) (Drawing, 2D Design, or 3D Design)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1399	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Successful completion of Honors Art is recommended</li> <li>• 'A' or 'B' in a previous full-year art course - Honors Art or Drawing and Painting 3,</li> <li>• OR 'A' or 'B' average in at least four sections of semester art courses,</li> <li>• OR Approval from the AP Art and Design instructor with the submission of at least 5-7 recent artworks and a journal/sketchbook</li> </ul>		
	<p>Advanced Placement (AP) Art &amp; Design is a studio course designed to meet the criteria of College Board's <a href="#">AP Art &amp; Design Course and Exam</a> by creating a portfolio of artwork specific to either the <a href="#">AP Drawing, 2D Art &amp; Design</a>, or <a href="#">3D Art &amp; Design</a> portfolio requirements. The AP Art and Design course is the equivalent of a one-semester, introductory college course and offers college credit through the La Roche University Scholar Program or successful completion and passing of the Advanced Placement exam. Students begin with creating an inquiry that will guide their development of a portfolio of artwork, any 2D and/or 3D art mediums can be explored. Within their artwork students are challenged with demonstrating experimentation, revision, and synthesis of materials, processes, and ideas in connection to their inquiry. Students will learn how to navigate problems and setbacks, innovate new ideas, research and implement cross-disciplinary subjects, manage projects, and experiment as well as take risks helping to prepare students for any career.</p>		

<b>Course Title:</b>	Computer Multimedia Arts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0806	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>		
	<p>In this course, the students design and create original digital art and multimedia presentations that include animation, video, photography, graphics, and sound. Students shoot, edit, composite, and create special effects in video using professional digital video software. Students create rotoscope and stop-motion animations. Students learn sound recording, editing, and design and compose music using professional music software. In the independent final project, students are encouraged to work to their interests and strengths, emphasizing a particular subject or artistic discipline. Projects have included digital art or music portfolios, website development, online exhibits, learning games, multimedia stage performances, and interactive presentations on a variety of topics.</p>		

## Visual Arts

<b>Course Title:</b>	Advanced Computer Multimedia Arts	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	0807	<b>STEM:</b>	Yes
<b>Open to Grade(s):</b>	11, 12	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Successful completion of Computer Multimedia Arts</li> </ul>		
	<p>Advanced Computer Multimedia Arts allows students to continue to design and create original media rich presentations, videos, animations, websites, and interactive games. This course builds upon photomontage, sound design, digital video, and animation concepts from the Multimedia Arts course. Students will explore advanced layout techniques, video mapping, augmented animation styles, and post-production video effects. Students will have the opportunity to create architectural projections, vector-based art, interactive portfolios, and mixed media installations.</p> <p>The course emphasizes conception and planning, solving design challenges, personal artistic expression, and communication through new media technology. The course provides a foundation for careers in the growing field of web, layout, and multimedia design.</p>		

## World Languages

North Allegheny believes a World Language Program should foster and support the students' recognition of the world as a global society composed of diverse languages and cultures. North Allegheny also responds to the very practical need of its students to be prepared for higher learning at the college/university level and beyond. Therefore, a successful World Language Program will enable students to develop self-awareness and insight into cultural differences while acquiring the necessary skills to communicate in a language other than their own.

The following are important components of an effective and successful program:

**Communication:** Comprehending what is read and heard and being understood when one speaks and writes

**Culture:** Appreciating culture of the people who speak the language today and of those who spoke the language in the past

**Connections:** Acquiring and reinforcing knowledge of other disciplines through study of the target language

**Comparisons:** Relating the study of the target language to the student's own language and culture

**Communities:** Cultivating responsible and productive citizens of the world

**Critical Thinking:** Developing the ability to analyze, synthesize, and evaluate information

### World Language Scope and Sequence

2023-2024 GRADE	ACADEMIC	HONORS
9	Academic Level 2	Honors Level 2
10	Academic Level 3	Honors Level 3
11	Academic Level 4	Honors Level 4
12	Honors Level 5	AP

**Please note:**

*The Honors Level 5 is offered as the culminating course for the Academic Level 4 student. Students will schedule for the Honors Level 5. The Honors Level 4 and Level 5 courses are conducted in the target language.*

## Classical Languages

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Latin 1	1421	9,10,11,12
1.0	Academic Latin 2	1422	9,10,11,12
1.0	Honors Latin 2	1423	9,10,11,12
1.0	Academic Latin 3	1424	9,10,11,12
1.0	Honors Latin 3	1425	9,10,11,12
1.0	Academic Latin 4	1426	9,10,11,12
1.0	Honors Latin 4 (CHS)	1427	9,10,11,12
1.0	Honors Latin 5 (CHS)	1428	9,10,11,12
1.0	AP Latin (CHS)	1429	9,10,11,12



# Modern Languages

<b><u>CREDIT</u></b>	<b><u>COURSE TITLE</u></b>	<b><u>COURSE #</u></b>	<b><u>OPEN TO GRADES</u></b>
1.0	French 1	1401	9,10,11,12
1.0	German 1	1411	9,10,11,12
1.0	Spanish 1	1431	9,10,11,12
1.0	Academic French 2	1402	9,10,11,12
1.0	Academic German 2	1412	9,10,11,12
1.0	Academic Spanish 2	1432	9,10,11,12
1.0	Honors French 2	1403	9,10,11,12
1.0	Honors German 2	1413	9,10,11,12
1.0	Honors Spanish 2	1433	9,10,11,12
1.0	Academic French 3	1404	9,10,11,12
1.0	Academic German 3	1414	9,10,11,12
1.0	Academic Spanish 3	1434	9,10,11,12
1.0	Honors French 3	1405	9,10,11,12
1.0	Honors German 3	1415	9,10,11,12
1.0	Honors Spanish 3	1435	9,10,11,12
1.0	Academic French 4	1406	9,10,11,12
1.0	Academic German 4	1416	9,10,11,12
1.0	Academic Spanish 4	1436	9,10,11,12
1.0	Honors French 4 (CHS)	1407	9,10,11,12
1.0	Honors German 4 (CHS)	1417	9,10,11,12
1.0	Honors Spanish 4 (CHS)	1437	9,10,11,12
1.0	Honors French 5 (CHS)	1408	9,10,11,12
1.0	Honors German 5 (CHS)	1418	9,10,11,12
1.0	Honors Spanish 5 (CHS)	1438	9,10,11,12
1.0	AP French (CHS)	1409	9,10,11,12
1.0	AP German (CHS)	1419	9,10,11,12
1.0	AP Spanish (CHS)	1439	9,10,11,12

**(CHS) Indicates College in High School Course**

## Classical Languages

<b>Course Title:</b>	Latin 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1421	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>In this course, students will comprehend the Latin language on a novice level through practice in reading, writing, and speaking. They will relate Latin to English vocabulary and compare the structure of both languages. In addition, students will develop an understanding of the history and culture of the Romans, especially during the first century A.D. in Pompeii.</p>		

<b>Course Title:</b>	Academic Latin 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1422	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 75% in Latin 1</li> </ul>		
	<p>Students will read more complex Latin passages and further develop their Latin and English vocabulary and grammar skills. More time will be spent in this course on review and practice of these basic skills. The readings focus on Roman culture in Britain and Egypt in the first century A.D.</p>		

<b>Course Title:</b>	Honors Latin 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1423	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9-12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 85% in Latin 1</li> </ul>		
	<p>Students will read more complex Latin passages and further develop their Latin and English vocabulary and grammar skills. In this class, the readings focus on Roman culture in Britain and Egypt in the first century A.D.</p>		

<b>Course Title:</b>	Academic Latin 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1424	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirement:</b>	<ul style="list-style-type: none"> <li>Minimum 75% in Academic Latin 2</li> </ul>		
	<p>In this course, students will refine their comprehension skills as they read and listen to increasingly longer and more complex passages of Latin. They will encounter more challenging grammar and writing exercises, and they will build their English vocabulary through the extensive study of Latin root words. More time will be spent in this course on review and practice of basic skills. The readings in this course focus on the town of Aquae Sulis and the Roman Army in Britain.</p>		

## Classical Languages

<b>Course Title:</b>	Honors Latin 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1425	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 85% in Honors Latin 2</li> </ul>		
	<p>Students will refine their comprehension skills as they read and listen to increasingly longer and more complex passages in Latin. They will encounter more challenging grammar and writing exercises, and they will build their English vocabulary through the extensive study of Latin root words. The readings in this course focus on the Roman Army in Britain, and on the political intrigues in the city of Rome during the reign of the Emperor Domitian.</p>		

<b>Course Title:</b>	Academic Latin 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1426	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 75% in Academic Latin 3</li> </ul>		
	<p>The primary objective of this course is to advance students from reading adapted Latin passages toward authentic Latin texts. This is accomplished through a succession of stages which augment the vocabulary and sentence structures already mastered in earlier levels. A second important emphasis of this course is to enable students to write more easily in Latin. The readings in this course focus on the political intrigues in the city of Rome during the reign of the Emperor Domitian.</p>		

<b>Course Title:</b>	Honors Latin 4 (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1427	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 85% in Honors Latin 3</li> </ul>		
	<p>Students will continue the established Latin sequence via the Cambridge Latin Course. The students will also read authentic Latin texts. An anthology of Latin prose and poetry will expand the students' knowledge and appreciation of Greek and Roman mythology. Students will also continue to develop their writing skills. Each unit will expand the students' ability to use a variety of Latin sentence structures. Each unit of study is geared to prepare students for success in the Advanced Placement course.</p>		

## Classical Languages

<b>Course Title:</b>	Honors Latin 5 (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1428	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 75% in Academic Latin 4</li> </ul>		
	<p>Students will continue the established Latin sequence via the Cambridge Latin Course. The students will also read authentic Latin texts. An anthology of Latin prose and poetry will expand the students' knowledge and appreciation of Greek and Roman mythology. Students will also continue to develop their writing skills.</p>		

<b>Course Title:</b>	AP Latin (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1429	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 80% in Honors Latin 4</li> </ul>		
	<p>The primary focus of this course is to enable students to demonstrate an ability to read, analyze, and critique authentic Latin prose and poetry. Preparation for the Advanced Placement Latin test is an important goal and focus. This course is almost exclusively a reading course. The Advanced Placement syllabus includes sections of Vergil's epic poem <u>The Aeneid</u> and Pliny the Younger's Epistulae.</p>		

## Modern Languages

<b>Course Title:</b>	French, German, Spanish 1	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1401, 1411, 1431	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>These courses are designed for students who are beginning their language study. They introduce students to the basic language skills of listening, speaking, reading, and writing. Equal emphasis is placed on all areas of study. At the same time, students learn to appreciate the similarities and differences among the cultures studied.</p>		

<b>Course Title:</b>	Academic French, German, Spanish 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1402, 1412, 1432	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 75% in level 1</li> </ul>		
	<p>These courses expand and intensify the skills introduced in Level 1. While listening and speaking remain as primary goals of the class, each course now places additional emphasis upon reading and writing. The students will strengthen their understanding and appreciation of the target culture.</p>		

<b>Course Title:</b>	Honors French, German, Spanish 2	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1403, 1413, 1433	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 90% in level 1</li> </ul>		
	<p>In addition to the attributes of Academic Level 2, the students will be exposed to an enhanced variety of listening, speaking, reading, and writing activities. Grammar topics and vocabulary that are beyond the scope of Academic Level 2 will also be covered. The students will be expected to complete independent assignments.</p>		

<b>Course Title:</b>	Academic French, German, Spanish 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1404, 1414, 1434	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 75% in Academic level 2</li> </ul>		
	<p>These courses provide continued practice in the four basic skills of language learning. Structures learned in Levels 1 and 2 are expanded and new ones introduced. Pronunciation habits and intonation patterns are refined. Reading and writing are given added emphasis. Knowledge of the people and their country is broadened.</p>		

## Modern Languages

<b>Course Title:</b>	Honors French, German, Spanish 3	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1405 ,1415 ,1435	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 85% in Honors level 2</li> </ul>		
	<p>Students will be exposed to an enhanced variety of listening, speaking, reading, and writing activities. Grammar topics and vocabulary that are beyond the scope of Academic Level 3 will also be covered. The students will be expected to complete independent assignments. Many of the classes are conducted in the target language and students are expected to increase their speaking proficiency.</p>		

<b>Course Title:</b>	Academic French, German, Spanish 4	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1406, 1416, 1436	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11,12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 75% in Academic level 3</li> </ul>		
	<p>These courses provide the student with an opportunity to review and practice the language skills previously acquired. In addition, new and more complex linguistic structures are introduced, allowing students to communicate more freely in the target language. The conversational approach of language learning is stressed, and cultural connections are enhanced through meaningful classroom discussions.</p>		

<b>Course Title:</b>	Honors French, German, Spanish 4 (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1407, 1417, 1437	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 85% in Honors level 3</li> </ul>		
	<p>These courses continue the development of the language skills of listening, speaking, reading, and writing. Emphasis is on oral proficiency and composition. In addition, reading skills and vocabulary are broadened through a variety of supplemental works. Classes are conducted in the target language and students are required to respond in the target language. Upon successful completion of these courses, students are strongly encouraged to take the Advanced Placement course.</p>		

## Modern Languages

<b>Course Title:</b>	Honors French, German, Spanish 5 (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1408, 1418, 1438	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum of 75% in Academic level 4</li> </ul>		
	<p>These courses continue the development of the language skills of listening, speaking, reading, and writing. Emphasis is on oral proficiency and composition. In addition, reading skills and vocabulary are broadened through a variety of supplemental works. Classes are conducted in the target language and students are required to respond in the target language.</p>		

<b>Course Title:</b>	AP French, German, Spanish (CHS)	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1409, 1419, 1439	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12	<b>NCAA:</b>	Yes
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>Minimum 80% in Honors level 4</li> </ul>		
	<p>These courses are designed to further the development proficiency in listening comprehension, speaking, reading, and writing to prepare students to take the AP Language Exam in one of these three languages. The courses are conducted in the target language and students are expected to use the target language at all times. Reading materials are drawn from a variety of authentic literary works and contemporary articles. Composition skills are enhanced by frequent writing assignments on many different topics. Conversations, discussions, oral reports, and similar activities ensure practice in the spoken language.</p>		

# Experiential Learning Activities

<u>CREDIT</u>	<u>COURSE TITLE</u>	<u>COURSE #</u>	<u>OPEN TO GRADES</u>
1.0	Daily Living	1123, 1124, 1125, 1126	9,10,11,12, 12+
0.5	Executive Functioning	1102, 1103, 1104	9,10,11,12, 12+
1.0	Career Readiness 1	1115, 1116, 1117, 1118	9,10,11,12, 12+
0.5/1.0	Vocational Training	1127, 1128, 1129, 1130	9,10,11,12, 12+

## Experiential Learning Activities

<b>Course Title:</b>	Daily Living 9, 10, 11, 12, 12+	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1123 (9) 1124 (10) 1125 (11) 1126 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Daily Living is designed to provide instruction in the area of independent living to prepare for practical experiences in the world outside of the high school environment. Topics relate to self-help, housekeeping, and food preparation skills. Current events, health, and science topics will also be discussed as appropriate and fostered to the individual student needs.</p>		

<b>Course Title:</b>	Executive Functioning	<b>Credit Value:</b>	0.5
<b>Course Number:</b>	Semester 1: 1102 Semester 2: 1103 Full year/part time: 1104	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	<p>Executive Functioning is designed for students who require direct instruction in the area of executive functioning as determined by the IEP team. This course utilizes a curriculum that focuses on executive functioning skills including working memory, planning/prioritization, organization, response inhibition, emotional control, sustained attention, task initiation, time management, goal-directed persistence, etc. Students will learn leadership skills that will allow them to succeed in and out of the school setting. This course will have an emphasis on practicing skills learned in class through individual and group work to integrate it and generalize these skills within their everyday lives.</p>		



## Experiential Learning Activities

<b>Course Title:</b>	Career Readiness I	<b>Credit Value:</b>	1.0
<b>Course Number:</b>	1115 (9) 1116 (10) 1117 (11) 1118 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	This course will cover several aspects of work/career readiness including exploring careers, obtaining and maintaining employment, resume writing, interviews, applications and interacting with coworkers. A portfolio will be the culminating project.		

<b>Course Title:</b>	Vocational Training	<b>Credit Value:</b>	0.5, 1.0
<b>Course Number:</b>	1127 (9) 1128 (10) 1129 (11) 1130 (12 and 12+)	<b>STEM:</b>	No
<b>Open to Grade(s):</b>	9, 10, 11, 12, 12+	<b>NCAA:</b>	No
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
	Vocational education is designed to provide instruction in the area of vocational skills necessary for future employment. Flexible scheduling may be provided to accommodate for vocational experiences.		

## Career and Technical Education

### 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<sup>st</sup> 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<sup>th</sup> day of the first semester, unless the student has prior education experience within a career center.

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

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

To determine the free credits offered for Pennsylvania Career and Technical Educational Programs of Study (POS) visit the website <http://www.collegetransfer.net/>. After selecting your Program of Study and your high school graduation year, you can view all the colleges offering free credits for your particular CTE program. Additionally, A.W. Beattie Career Center maintains many college articulation agreements, along with dual enrollment and pre-apprenticeship opportunities for students. Please visit our website [www.beattietech.com](http://www.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 School Counselor for additional information. Several of A. W. Beattie's programs require uniforms and equipment. The student and family assume this cost. 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<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> 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.

## Course Offerings and Descriptions

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

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

**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<sup>th</sup> and 12<sup>th</sup> 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<sup>th</sup> and 12<sup>th</sup> 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 SERV Safe Food Safety Certification.

**Robotics Engineering Technology (RET)** – Students interested in the most recent, innovative technology have 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.

## **Certification**

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.***

***A.W. Beattie Career Center***

***9600 Babcock Blvd.***

***Allison Park, PA 15101***

***Phone: 412-847-1902***

***Fax: 412-366-9600***

***Email:***

***[kimzylinski@beattietech.com](mailto:kimzylinski@beattietech.com)***

***[sara.goodyear@beattietech.com](mailto:sara.goodyear@beattietech.com)***

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.

## Unique Learning Opportunities

- Aviation Aerospace (A.F.J.R.O.T.C.)
- Cooperative Work Experience
- IMPACT Program
- Library

### **Aviation / Aerospace A.F.J.R.O.T.C.**

North Allegheny is one of 285 schools nationally which offers the Air Force Junior ROTC program. The primary goal of the program is to develop better informed citizens about aerospace, and through leadership education, to develop responsible and confident students. The four courses listed in the Course Selection section of the Program of Studies constitute the basic program. There are additional benefits to enrollment:

Although there is absolutely no military commitment or obligation of any kind connected with the courses, there are benefits for those who may consider a period of service in the military. These benefits apply to the Army, Navy, Air Force, and Coast Guard:

- For those students who may enlist in the military after completing high school and AFJROTC, there is an immediate grade promotion (from E-1 to E-3). This promotion would affect starting salary.
- There is assistance in obtaining a 4-year ROTC Scholarship for students in the top 15% of their class. These scholarships have been worth \$40,000 each in some cases.
- **Additional information can be obtained by contacting the School Counseling Office at the Senior High School.**

### **Cooperative Work Experience**

Students enrolled in Advanced Marketing or Career Development can earn credit for Work-Study through Co-op. Students spend part of the school day at a work site under the supervision of school personnel and the other part of the day fulfilling academic requirements at the Senior High School. Students should refer to the course descriptions and confer with their school counselor for additional information.

### **IMPACT Program**

#### ***Grades 9, 10***

The IMPACT Program is a voluntary, regular educational program for 9th and 10th grade students who meet the NASD educational requirements. Students are recommended by teachers and/or counselors and are interviewed for the program. Enrollment in the program is limited; therefore, students are selected on a priority basis according to academic needs. The IMPACT Program teachers provide intense skill development in the core curriculum areas of mathematics, English, social studies, and science. Using a team approach, study strategies, organizational tools, and career development are also emphasized as part of the IMPACT Program's instruction.

<u><b>GRADE 9</b></u>	<u><b>COURSE</b></u>
Essential English 1 - IMPACT	1209
Algebra 1 - IMPACT	0701
Biology - IMPACT	4209
European History - IMPACT	1002
American History - IMPACT	1001
 <u><b>GRADE 10</b></u>	 <u><b>COURSE</b></u>
Essential English 2 - IMPACT	1210
Geometry - IMPACT	0711
Intro to Physics & Chemistry - IMPACT	4210
World Cultures - IMPACT	1011

## Unique Learning Opportunities

### Library

#### *Grades 9-12*

The North Allegheny School District Libraries function as an integral part of the total curriculum and seek to empower students to:

- Develop a lifelong love of literature.
- Seek and critically evaluate information.
- Understand and practice ethical use of information.
- Recognize and appreciate diverse cultures.
- Effectively communicate, collaborate, and create.

The teaching of these information and technology objectives is the joint responsibility of the librarians and the subject area teachers, who plan together to develop and deliver lessons. A sequential, problem-solving research approach is taught as students gather, interpret, and organize information for curricular projects.

Students have access to award-winning databases through District subscriptions to EBSCOhost, Gale, ABC-CLIO, Infobase, Congressional Quarterly, Teen Health and Wellness, World Book, and the AccessPA POWER Library. These databases provide millions of articles from diverse, credible sources and offer additional support through leveled text, read-aloud functionality, font size change, videos, audio clips, primary sources, and recommended websites. Additionally, NoodleTools, an online citation resource, is available to help students cite and organize their research. The collections of all the North Allegheny Libraries are accessible from the North Allegheny District homepage under Academics: Library, and through Blackboard. Resources are available to students at school and remotely.

In addition to scheduled class time, students have frequent opportunities to use the Library to pursue individual academic needs and personal interests. Libraries are open both before and after school, and students may also obtain passes to visit during study halls or lunch periods.



# Activities

There are a variety of activities offered at the Intermediate High School and the Senior High School. Students should contact the principal for the name of the sponsor of the activities listed below.

## **Grades 9 and 10**

Actors Society  
 American Sign Language  
 Amnesty International  
 Art Club  
 ASAP (After School Achievement Program)  
 Astronomy Club  
 Basic Leadership & Development (AFJROTC)  
 Best Buddies  
 Book Discussion Club  
 Bowling  
 Cheerleading  
 Chemistry Club  
 Chess Club  
 Chorus  
 Class Council  
 Computer Club  
 Concert Band  
 Creative Writing Club  
 Dance Team  
 DECA (An Association of Marketing Students)  
 Drill Team  
 Environment Club  
 Fashion Club  
 Film and Entertainment Club  
 Fitness Center  
 Flag Team  
 Forensics/Debate  
 French Club  
 Future Business Leaders of America (FBLA)  
 Gardening Club  
 Gay Straight Alliance (GSA)  
 German Club  
 Global Leadership Student Club  
 Guitar Club  
 Health Occupational Students of America (HOSA)  
 Interact Club  
 Intermediate High School Fall Play  
 Intermediate High School Spring Play  
 Italian Club  
 Jazz Ensemble  
 Junior Classical League (JCL)  
 Key Club  
 Literary Magazine, First Draft  
 Majorettes  
 Marching Band  
 Multicultural Student Union (MSU)  
 National Art Honor Society  
 Orchestra

Percussion Ensemble  
 Project Lit  
 Robotics Club  
 SADD  
 Science Bowl Club  
 Ski Club  
 Social Injustice Club  
 Spanish Club  
 Spring Musical Stage Crew  
 Strolling Strings  
 Student Council  
 Student Support Leadership Team  
 SWAT  
 Table Tennis  
 Talent Show  
 Technology Student Association (TSA)  
 Weightlifting  
 Wind Ensemble  
 Yearbook

## **Grades 11 and 12**

Actor's Society Club  
 Amnesty International  
 Astronomy Club  
 Best Buddies  
 Chamber Choir  
 Cheerleaders (NASH)  
 Choral Ensemble  
 Color Guard  
 Computer Club  
 Concert Band  
 Concert Choir  
 Concert Percussion Ensemble  
 Creek Connections  
 Cultural Communications Alliance  
 Dance Team  
 DECA (An Association of Marketing Students)  
 Environment Club  
 Fall Play  
 Fall Play Stage Crew  
 French Club  
 Future Business Leaders of American (FBLA)  
 Future Filmmakers Club  
 Gay Straight Alliance (GSA)  
 German Club  
 Golden Strolling Strings  
 Health Occupational Students of America (HOSA)  
 Henna Club  
 Honors Wind Ensemble  
 Indoor Drumline

Indoor Guard  
 Interact Club  
 Italian Club  
 Investment Club  
 Jazz Ensemble I  
 Jazz Ensemble II  
 Jazz Ensemble III  
 Junior Class Advisors  
 Junior Classical League (JCL)  
 Key Club  
 Korean Club  
 Majorettes  
 Marching Band  
 Mathematics Team  
 Mock Trial Team  
 Model UN  
 Multicultural Student Union (MSU)  
 NA FCCLA  
 NASH Library Club  
 NASH Photography Club  
 NASH Ski and Board Club  
 NASH Youth Group  
 National Art Honor Society  
 National English Honors Society  
 National Honor Society  
 NATV  
 NORTH STAR (Newspaper)  
 Orchestra  
 Origami Club  
 Percussion Ensemble  
 Principal's Advisory Committee  
 Quiz Team  
 Robotics Club  
 R.O.T.C.  
 R.O.T.C. Drill Team  
 SADD  
 Safari (Yearbook)  
 Senior Class Advisors  
 Shakespeare Club  
 Spanish Club  
 Speech and Debate  
 Spring Musical Stage Crew  
 STEAMinism  
 Student Council  
 Symphonic Band  
 Teaching Peace Initiative  
 Technology Student Association (TSA)  
 Ukulele Club  
 Variations  
 Wellness Club  
 Wind Ensemble  
 Winter Guard  
 Z-Club

# Athletics

Students should contact the [Athletic Director's Office](#) for the name of the coach for the activities listed below:

<p><b>Fall Sports</b></p> <p>Basketball (Girls) – Middle School  Cross Country (Boys/Girls) – Middle School, Junior Varsity, Varsity  Field Hockey (Girls) – Middle School, Junior Varsity, Varsity  Flag Football * (Girls)  Football (Boys) – Middle School, Freshman, Junior Varsity, Varsity  Golf (Boys) – Junior Varsity, Varsity  Golf (Girls) – Junior Varsity, Varsity  Soccer (Boys) – Middle School, Junior Varsity, Varsity  Soccer (Girls) – Middle School, Junior Varsity, Varsity  Tennis (Girls) – Junior Varsity, Varsity  Volleyball (Girls) – Junior Varsity, Varsity  Water Polo (Girls/Boys) – Junior Varsity, Varsity</p> <p><b>Winter Sports</b></p> <p>Basketball (Girls) – Middle School, Junior Varsity, Varsity  Basketball (Boys) – Middle School, Freshman, Junior Varsity, Varsity  Bowling * (Girls/Boys) – Junior Varsity, Varsity  Diving (Girls/Boys) – Varsity  Swimming (Girls/Boys) – Varsity  Ice Hockey * (Boys) – Junior Varsity, Varsity  In-Line Hockey * (Girls/Boys) – Junior Varsity, Varsity  Indoor Track (Girls/Boys) – Varsity  Wrestling (Boys) – Junior High, Junior Varsity, Varsity  Wrestling (Girls) – Varsity  Gymnastics (Girls) – Varsity</p>	<p><b>Spring Sports</b></p> <p>Baseball – Middle School, Freshman, Junior Varsity, Varsity  Softball – Junior High, Junior Varsity, Varsity  Tennis (Boys) – Junior Varsity, Varsity  Track and Field (Boys/Girls) – Middle School, Junior Varsity, Varsity  Volleyball (Boys) – Middle School, Junior High, Junior Varsity, Varsity  Volleyball (Girls) – Junior High Gold (Grades 7-9), Junior High Black (Grades 7-8)  Lacrosse (Boys) – Sophomore, Junior Varsity, Varsity  Lacrosse * (Girls) – Junior Varsity, Varsity  Rowing * (Girls/Boys) – Varsity  Cheerleading – Middle School, Freshman, Junior Varsity, Varsity (Fall and Winter)</p> <p><b>* Indicates a Club Sport</b></p>
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# Pennsylvania Pathways to Graduation

## Keystone Proficiency Pathway *Numeric or Non-Numeric Scores*

**Algebra I**  
Proficient or  
Advanced

**Biology**  
Proficient or  
Advanced

**Literature**  
Proficient or Advanced

## Keystone Composite Pathway *Numeric Scores Only*

At least 1 Keystone Exam scaled score is  
**1500 or Greater**

No Keystone Exam score is  
**Below Basic**

The Keystone Exam 3-score composite is  
**4452 or Greater**  
The Keystone Exam 2-score composite is  
**2939 or Greater**  
*(where eligible under §121.1)*

### CTE Concentrator

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient.

#### CTE Concentrator

1 Artifact from pathway criteria

### Alternative Assessment

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient.

#### Alternative Assessment

1 Artifact from pathway criteria

### Evidence-Based Pathways

Meet locally established, grade-based requirements for Keystone content in which the student is less than Proficient.

#### Evidence-Based

3 Artifacts from pathway criteria

### Waiver

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

### Individualized Education Plan

A student with a disability who is unable to satisfy pathway requirements but who satisfactorily completes a special education program is granted a diploma under Title 22 §4.2d.

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

# Pathway Criteria

CTE Concentrator	Alternative Assessment	Evidence-Based
1 Artifact	1 Artifact	<b>3 Artifacts</b> <b>consistent w/student goals</b> <b>ONE or more from Section One</b> <b>No more than TWO from Section Two</b>
<p>Industry-based competency certification</p> <p>Likelihood of industry-based competency assessment success</p> <p>Readiness for continued engagement in CTE Concentrator program of study</p>	<p>Attainment of one alternative assessment score or better: ACT (21), ASVAB AFQT (31), PSAT/NMSQT (970), or SAT (1010)</p> <p>Attainment of Gold Level or better on ACT WorkKeys</p> <p>Attainment of 3 or better on AP Exam(s) related to each Keystone content area in which less than Proficient.</p> <p>Attainment of 4 or better on IB Exam(s) related to each Keystone content area in which less than Proficient.</p> <p>Successful completion of concurrent enrollment course(s) related to each Keystone content area in which less than Proficient.</p> <p>Successful completion of a pre-apprenticeship program</p> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4yr program for college-level coursework</p>	<p><b>Section 1</b></p> <p>Attainment of 630 or better on any SAT Subject Test</p> <p>Attainment of Silver Level or better on ACT WorkKeys</p> <p>Attainment of 3 or better on any AP Exam</p> <p>Attainment of 3 or better on any IB Exam</p> <p>Successful completion of any concurrent enrollment or postsecondary course</p> <p>Industry-recognized credentialization</p> <p>Acceptance into accredited, non-profit Institution of Higher Education (IHE) for college-level coursework in an other-than-4yr program</p> <p><b>Section 2</b></p> <p>Attainment of Proficient or Advanced on any Keystone Exam</p> <p>Successful completion of a service-learning project</p> <p>Letter guaranteeing full-time employment or military enlistment.</p> <p>Completion of an internship, externship, or cooperative education program</p> <p>Compliance with NCAA Division II academic requirements</p>

# Telephone Directory

## North Allegheny Senior High School:

Telephone: 724-934-7200

Direct Extension  
724-934-

Mr. Matthew Buchak, Principal-----	7218
Mr. Garrett Miller, Assistant Principal-----	7217
Mr. Timothy Murray, Assistant Principal-----	7211
Mr. Robert Bozzuto, Athletic Director-----	7238
Ms. Jennifer Rosato, Counselor (A – Dn)-----	7226
Ms. Rhonda Bielawski, Counselor (Do – J)-----	7225
Ms. Mary Insana, Counselor (K – M)-----	7275
Mr. Kevin Thompson, Counselor (N – Sh)-----	7229
Ms. Michelle Buettner, Counselor (Si – Z)-----	7223
Mr. Art Walker, Student Assistance -----	7215

## North Allegheny Intermediate High School:

Telephone: 412-369-5530

Direct Extension  
412-369-

Dr. Heather Hibner, Principal -----	5463
Dr. Melanie Manes, Assistant Principal -----	5450
Dr. John Morey, Assistant Principal -----	5460
Mr. Bryan Kiggins, Counselor (A – Dn) -----	5467
Ms. Madison Lewis, Counselor (Do – J) -----	5843
Ms. Meghan Mayhew, Counselor (K – M) -----	5485
Mr. Matthew Butler, Counselor (N – Sh) -----	5480
Ms. Rianna Liebhenguth, Counselor (Si – Z) -----	5465
Mr. Douglas Brinkley, IMPACT/Student Assistance -----	5466

## Carson Middle School:

Telephone: 412-369-5520

Direct Extension  
412-369-

Dr. Caitlin Ewing, Principal -----	5425
Ms. Janel Biagiarelli, Assistant Principal -----	5427
Mr. Chance Petro, Counselor (A – L) -----	5421
Ms. Courtney Vadnais, Counselor (M – Z) -----	5421

## Ingomar Middle School:

Telephone: 412-348-1470

Direct Extension  
412-369-

Ms. Carla Hudson, Principal -----	1473
Dr. Jason Harding, Assistant Principal -----	1472
Ms. Darla Allerton, Counselor (A – L) -----	1404
Ms. Lynne Earley, Counselor (M – Z) -----	1476

## Marshall Middle School:

Telephone: 724-934-6060

Direct Extension  
724-934-

Dr. Dan Swogger, Principal -----	6036
Dr. Jenna Frazer, Assistant Principal -----	6037
Ms. Shannon Salpeck, Counselor (M – Z) -----	6038
Mr. Jeff Smalley, Counselor (A – L) -----	6038

## District Administration:

Telephone: 412-366-2100

Direct Extension  
412-

Dr. Brendan Hyland, Superintendent -----	369-5419
Mr. David Deramo, Assistant Superintendent of Secondary Education-----	369-5896
Dr. Michele Dowell, Assistant Superintendent of Elementary Education-----	630-5826
Dr. Amy DeLuca, Director of Student Services -----	635-4110

## Departments Chairpersons

<a href="#"><u>AFJROTC — Lieutenant Colonel Donald Accamando, NAI</u></a>	412-369-5455
<a href="#"><u>Business, Computer, and Information Technology — Jordan Langue, NASH</u></a>	724-934-7265
<a href="#"><u>English Language Arts — Jeremy Rak, NAI</u></a>	412-369-5405
<a href="#"><u>Family and Consumer Sciences — Elizabeth Gallagher, NASH</u></a>	724-934-7233
<a href="#"><u>Health &amp; Physical Education — David Schmidt, NAI</u></a>	724-369-5807
<a href="#"><u>Library - Laura Wienand</u></a>	724-934-7255
<a href="#"><u>Mathematics — Robert Bell, Jr. and Gary Grater NASH</u></a>	412-934-7200 Ext. 35370
<a href="#"><u>Music — Robert Tozier, NASH</u></a>	724-934-7230
<a href="#"><u>School Counseling — Bryan Kiggins, NAI</u></a>	412-369-5467
<a href="#"><u>Science — Christopher Omasits, NASH</u></a>	724-934-7207
<a href="#"><u>Social Studies — Joelle Keats, NASH</u></a>	724-934-7211
<a href="#"><u>Technology and Engineering Education — Heath Lauster, NASH</u></a>	724-934-7200
<a href="#"><u>Visual Arts — Michael Bockoven, NAI</u></a>	412-369-5530 Ext. 60208
<a href="#"><u>World Language — Marcie Good, NASH</u></a>	724-934-7273



