



**NORTHGATE
SCHOOL DISTRICT**

**Middle/High School
Course Catalog and
Career Pathways Guide
2025-2026**



#CareerReadyPA





NORTHGATE
SCHOOL DISTRICT

INTRODUCTION and WELCOME

On behalf of the administration and staff of Northgate Middle School and High School, we are very excited to share the 2025-2026 Course Catalog and Career Pathways Guide! Northgate School District is focused on *Students First and Foremost*. We strive to ensure educational experiences are dynamic and individualized based on student interests and future goals. The purpose of our Course Catalog and Career Pathways Guide is to provide our students and their families with a comprehensive listing of courses available to middle school and high school students along with information about our Career Pathways. An overview of policies and procedures relevant to Northgate's graduation requirements is also included.

This document has been prepared to assist every student entering grades 9 through 12 in planning your comprehensive educational high school plan. We encourage our students and families to sit down together and review the course requirements for graduation, discuss the course selection process, and access and complete the Northgate Education Plan Form. The NEP Form is an excellent tool to help every student design an academic program that will help you meet your college, technical school, military, and career goals. The Northgate School District Graduation Requirements are clearly defined on page 15. We request that every family also review the Keystone Exam expectations and information. Our secondary school staff will work cooperatively with each student and family through the scheduling process. As students make their scheduling decisions, it is important to recognize the requirements for college admission and/or career placement. Our teachers work collaboratively with students and our school counselors to make course recommendations prior to scheduling. Students also complete elective course requests based on individual interests and goals.

Northgate Middle and High School students are encouraged to discuss any concerns with their teachers, counselors, and families. Our secondary school team looks forward to collaborating with each student and family through the scheduling process.

STUDENT RIGHTS

The Northgate School District does not discriminate on the basis of race, color, age, creed, religion, gender, sexual orientation, ancestry, national origin, marital status, pregnancy or handicap/disability, or limited English proficiency in its educational programs, services, facilities, activities or employment policies as required by Title IX of the 1972 Educational Amendments, Titles VI and VII of the Civil Rights Act of 1964 as amended, Section 504 Regulations of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Section 204 Regulations of the 1984 Carl D. Perkins Act or any applicable federal statute.

COMPLIANCE STATEMENT

The Board declares it to be the policy of this District to provide an equal opportunity for all students to achieve their maximum potential through the programs offered in the schools regardless of race, color, age, creed, religion, gender, sexual orientation, ancestry, national origin, marital status, pregnancy or handicap/disability.

The district shall provide to all students, without discrimination, course offerings, counseling, assistance, employment, athletics and extracurricular activities. The district shall make reasonable accommodations for identified physical and mental impairments that constitute handicaps and disabilities, consistent with the requirements of federal and state laws and regulations.

The Board encourages students and third parties who have been subject to discrimination to promptly report such incidents to designated employees. The Board directs that complaints of discrimination shall be investigated promptly, and corrective action be taken when allegations are substantiated. Confidentiality of all parties shall be maintained, consistent with the district's legal and investigative obligations. No reprisals nor retaliation shall occur as a result of good faith charges of discrimination.

For information regarding civil rights or grievance procedures, or information regarding services, activities and facilities that are accessible to and usable by disabled persons, contact Dr. Caroline Johns, 591 Union Avenue, Pittsburgh, PA 15202.



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SHARED VISION, MISSION, and VALUES

Vision: Students First and Foremost

Mission: The Northgate School District provides a challenging academic program that prepares students to value learning, think critically and creatively, and embrace diverse viewpoints. With a focus on developing the whole child, the district provides experiences that encourage the development of empathy, integrity, and resilience to prepare all students to meet with success.

Core Values:

- **Challenging Academics:** We believe academic success for all students begins by developing foundational skills in reading and mathematics. Through a systematic approach, we meet each student's individual learning needs, and build environments that raise the bar for all students to think critically and take ownership of their learning.
- **Northgate Way:** We take pride in our schools and our community. We are proud to provide a high quality education in a nurturing environment, and we value the support of our community. We reflect the Northgate school culture by positively communicating and engaging in relationships that reflect our core mission and values.
- **Empower Students and Staff:** We value the diverse perspectives of our students and encourage them to confidently use their voice. We value the expertise of our staff and seek their input into our educational programming.
- **Value Diversity:** We view our diversity as an asset. We recognize that everyone brings unique, individual strengths to the school community. We develop opportunities for all stakeholders to see connections between themselves, the curriculum, and the district.
- **Whole-Child Focus:** We support the development of the physical, mental and unique talents of our student population through extra curricular opportunities (PBIS, the Chill Project, arts, athletics, clubs). We prioritize the full scope of a child's developmental needs and advance educational equity. Our whole child approach understands that students' education and life outcomes are dependent upon their access to deeper learning opportunities in and out of school, as well as their school environment and relationships.
- **Emphasis on Relationships:** We build healthy, strong relationships and care for each other. We strive to know each other's story and perspective. We treat others with courtesy, respect, and dignity. We view every interaction as an investment in improving relationships. We celebrate each other's successes.
- **Welcoming Environment:** We strive to make everyone feel welcomed and valued in our schools. This starts with the first greeting on the phone or in the office. We listen and ask questions to seek clarity when a colleague, parent, or student expresses a need. We take ownership and accept responsibility for making sure needs are met.
- **Community Allies:** We value community partnerships and recognize that it takes a village to enact the mission of the District and collectively "We" (parents/ guardians, faculty, staff and the broader community) can help students realize their potential and become good citizens.

SECONDARY BUILDING PERSONNEL

A full staff directory may be found at northgatesd.net

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CAREER PATHWAYS

Northgate Middle/High School utilizes a rigorous and viable Career Pathways Program to help students in the following ways:

- Exploring current areas of interest and strength for each student
- Identifying specific courses offered at Northgate that corresponds to specific interests and careers
- Creating an academic pathway at Northgate determined by student interest and desire
- Achieving success on a desired career pathway that will lead to some type of post-high school education, training, or employment

Our students will develop a career plan beginning in 7th grade by utilizing an online career planning and investigation tool, called *Smart Futures*. The program is a career exploration tool utilized by students during mentoring time to identify and explore career opportunities and course offerings based on the results of the interest inventories and activities that *Smart Futures* offers. Below is a description of how students will utilize *Smart Futures* throughout their journey to support their career plans.

How Northgate Students Use the Pathways

Beginning in 7th and 8th grade:

- Complete multiple interest surveys to help identify your interests and skills and the career cluster area in which they are located.
- Find the career pathway in your preferred cluster that most closely matches your career interests and skills.
- Explore course descriptions in the Northgate Course Catalog..
- Develop a Northgate Educational Plan to best create a map of your high school courses of study.

NORTHGATE MIDDLE SCHOOL

CORE ACADEMIC COURSES

ENGLISH LANGUAGE ARTS (ELA) 7

7th grade ELA prioritizes using evidence to analyze fiction (literary) and non-fiction (informational) texts. Students analyze characters and conflict and learn to cite evidence to support ideas and inferences about the texts as they draw larger conclusions about our world. Students are required to read multiple novels to increase reading stamina and to demonstrate ability to engage in longer texts. Students will write text-dependent analysis essays responding to texts and demonstrate analysis citing evidence to support the intended purposes. Writing includes recognizing and demonstrating a command of standard English grammar, usage, and mechanics to convey ideas. Students will become more active and informed readers and skilled writers.

ENGLISH LANGUAGE ARTS (ELA) 8

English 8 builds on the reading and writing skills and strategies from grade 7. 8th grade ELA focuses on both literature and composition. Students read and respond to a variety of literature including informational texts, poetry, essays, short stories, and novels. Emphasis is placed on critical reading and writing through shared responses and class discussion. Students write in the areas of description, narration, argumentation, and exposition. The development of analytical skills is also a key focus of the eighth grade English curriculum. Correct grammar usage and a formal approach is stressed daily in writing and speaking.

MATH 7

Math 7 curriculum is aligned to the PA Core Standards for Mathematics. Students explore the algebraic topics of integer, exponential, and rational expressions, functions and inequalities and how to solve them, proportionality, probability, and percentages. Visual display topics include graphing functions and inequalities, polygons, statistical displays, two and three-dimensional figures, such as triangles, circles, quadrilaterals, spheres, prisms, pyramids, conic and cylindrical solids. Opportunities are provided for students to master mathematical content and skills; develop the ability to make sense of problem situations; and build conceptual understanding.

ACCELERATED MATH 7

Grade 7 Accelerated Math is aligned to the PA Core Standards for Mathematics. Students explore proportional relationships, operations using rational numbers, linear equations and systems of linear equations, linear functions, random sampling and data distributions, transformations, real-world applications of area and circumference of two-dimensional figures, and surface area of three-dimensional figures. Opportunities are provided for students to master mathematical content and skills; develop the ability to make sense of problem situations; and build conceptual understanding. The primary goals of the course are to foster independent learning, encourage in-depth exploration of the content, and build the skills necessary for Algebra I.

MATH 8

Math 8 curriculum is aligned to the PA Core Standards for Mathematics. The focus of the course will be formulating and reasoning about expressions, equations and functions, solving equations and systems of equations. Students will analyze two and three dimensional space figures utilizing concepts of distance, angle, similarity, congruence, and understanding and applying the Pythagorean Theorem. Students will begin to become proficient with a graphing calculator and its use throughout this course. Opportunities are provided for students to master mathematical content and skills; develop the ability to make sense of problem situations; and build conceptual understanding.

ACCELERATED ALGEBRA I (Grade 8)

Prerequisite: Successful completion of Math 7 and Proficiency on the Grade 7 Mathematics PSSA

This course is aligned to the PA Core Standards for Mathematics and the PA Core Algebra 1 Standards. The focus of the course is formulating and reasoning about expressions, equations and functions, solving equations and systems of equations, operations with real numbers and expressions, linear equations, linear inequalities, functions, factoring algebraic expressions, coordinate geometry, and data analysis. Should students successfully complete Accelerated Math 8 *and* achieve proficiency on the Algebra Keystone Exam, they will be encouraged to enroll in Geometry and Biology in 9th grade.

SCIENCE 7

Discovering the scientific principles underlying everyday things makes science fun. Science 7 is an integrated study of physical science using the universal laws of science as a basis for an understanding of our surroundings. Qualitative as well as quantitative aspects of the laws will be discussed as they relate to the human body and our surroundings. Students will be able to make connections between the natural sciences and their everyday experiences. The physics strand of the course includes energy, motion, force, electricity, magnetism, sound, and light. The chemistry strand of the course includes atoms, elements, chemical bonding, and chemical reactions.

SCIENCE 8

Science 8 is an integrated study of life science using the universal laws of science as a basis for an understanding of our surroundings. Qualitative as well as quantitative aspects of content from cells to ecosystems will be explored. Students will be able to make connections between the natural sciences and their everyday experiences. Science 8 students will complete the PSSA Science 8 exam which includes science topics from the grades 6, 7, and 8 curriculum.

SOCIAL STUDIES 7

This course is a thematic and topical history of the world from ancient cultures through modern times. The courses centers on political, social, economic, and cultural developments throughout the history of the world. Students will have the opportunity and experience to engage in thematic units, project based learning, and integrated reading, writing, and speaking activities to learn about world history and connect themes and ideas to our modern world through current event learning activities.

SOCIAL STUDIES 8

8th-grade World Geography cultivates an understanding of global cultures, physical landscapes, and interconnectedness. Students will explore world geography, examine continents, countries, and regions in-depth and develop a deeper understanding of geographical concepts. Critical thinking skills are encouraged and practiced through discussions, collaborative projects, and independent learning activities. The course curriculum emphasizes connections between geography, history, economics, and social studies.

MIDDLE SCHOOL ELECTIVE PATHWAYS

PERFORMING ARTS PATHWAY

Students choosing the Performing Arts Pathway are guaranteed Band, Chorus, or both 5 days per week. Following this pathway Band and Chorus classes will take place during one of the exploratory rotations. Students who join the performing arts pathway will still be exposed to a majority of the exploratory rotations (Health, Physical Education, Computer Science, Art, STEM, and Industrial Arts) once during their middle school experience instead of each year.

MIDDLE SCHOOL CHOIR

Middle School Chorus is a group of mixed voices all coming together in song. Students experience an array of musical genres and become well-rounded musicians in this course. Students will learn proper vocal technique, performance skills, and knowledge of musical concepts. The National Standards of the Arts (Music Education) are followed. Middle School Chorus Members are held to the highest standard of excellence as are all Northgate Choral Music Ensembles. Our Chorus presents various evening performances for Fall, Winter, and Spring. Attendance is mandatory for all tech rehearsals and performances.

MIDDLE SCHOOL BAND

Middle School Band will focus on concert band repertoire and performances. All students must understand *participation at all band and band-related events is mandatory*. Additional rehearsals may be required. Progress is monitored through playing tests and performances. Members of the Middle School Band are eligible to participate in ensembles, such as jazz band. These groups rehearse after school. Additionally, students may be chosen to represent Northgate at various district and regional band events and festivals held in the area.

Students who do not choose the Performing Arts Pathway will explore the full range of the Exploratory 1 and 2 Pathways in 7th and 8th grade. Each course is 9 weeks long.

EXPLORATORY PATHWAY 1

HEALTH 7

The 7th grade Health course is an introductory class designed to provide 7th grade students with the essential knowledge and skills to promote personal well-being and make informed choices for a healthy lifestyle. Students will explore various aspects of physical, mental, and social health, and learn strategies for building strong, healthy habits that contribute to overall wellness. Key topics include nutrition, physical fitness, emotional health, stress management, safety, relationships, and the prevention of substance abuse.

PHYSICAL EDUCATION 7

The 7th grade Physical Education course focuses on developing physical fitness, motor skills, and a joy for active living. This course introduces students to a variety of physical activities and sports, encouraging them to stay active, develop teamwork and leadership skills, and understand the importance of maintaining a healthy lifestyle. Students will engage in activities designed to improve their strength, endurance, coordination, and flexibility, while also learning the basic rules and strategies of various sports.

COMPUTER SCIENCE 7

Computer Science 7 is a 9 week course designed to be an introduction to Computer Science for students of all ages. The course blends online, self-guided, and self-paced tutorials with “unplugged” activities that require no computer. Topics explored include: digital citizenship, current educational apps, problem-solving skills, and basic programming.

STUDIO ARTS 7

The 9 week Art course in 7th grade will provide a foundation in two and three-dimensional forms of art making. Students will focus on skill building through the exploration of various art media. Two-dimensional art media will include; painting, color theory, printmaking, collage, and a variety of drawing media such as graphite, charcoal, pastel, pen and ink. Three-dimensional art mediums and techniques will include a variety of hand building and sculpture techniques with the use of clay, plaster, wire, wood, paper mache, and found objects. This class provides students with an understanding of the elements of art and principles of design.

HEALTH 8

The 8th grade Health Course is a continuation of the 7th grade course. Through interactive lessons, discussions, and activities, students will gain a better understanding of their bodies, emotions, and the impact of choices on health. The course encourages students to take responsibility for their health and to develop a positive attitude toward lifelong fitness and wellness.

PHYSICAL EDUCATION 8

The 8th grade Physical Education course builds upon the foundational skills and knowledge acquired in 7th grade, offering students an opportunity to further develop their physical fitness, movement skills, and understanding of sports activities. Over the course of 9 weeks, students will engage in more advanced physical activities, with an emphasis on improving strength, endurance, coordination, and teamwork. This course focuses on refining individual skills while also enhancing students' ability to participate in team sports and understand strategies and rules.

COMPUTER SCIENCE 8

Computer Science 8 is a 9 week course for students to learn the beginning basics of the Python programming language. During this 12-week course students will learn how to draw shapes and explore basic animation. The Carnegie Mellon University computer science academy online platform is utilized. The course is called CS0 and is specifically designed for middle school aged students.

STUDIO ART 8

The 8th grade Studio Art course provides students with a foundational understanding of both two-dimensional (2D) and three-dimensional (3D) art-making techniques. Over the course of 9 weeks, students will explore a variety of materials, tools, and methods used to create art in different forms, including drawing, painting, sculpture, and other hands-on projects. The course will focus on building technical skills, fostering creativity, and developing an appreciation for the artistic process.

EXPLORATORY PATHWAY 2

MATERIALS AND FABRICATION 7

This 9 week course is designed to introduce students to the design process through experience and working knowledge of materials processing applications. Students will be introduced to types of wood, how timber is processed, and the purposes of wood in manufacturing and construction. Students will learn how to properly select and use hand tools, power tools, and machinery. Students will be learn various assembly processes through the use of adhesives and mechanical fasteners. The students will be learn to make project sketches, develop a set of working plans, create a bill of materials, and actively use measurement. Safety will be heavily emphasized.

STEM 7

In this dynamic STEM course, students will dive into the world of robotics, engineering, and coding using the VEX IQ STEM Labs Curriculum. Through hands-on projects and interactive labs, students will design, build, and program robots to solve real-world problems. They will explore STEM concepts such as mechanics, sensor integration, and algorithmic thinking while developing critical skills of teamwork, problem-solving, and creativity. Whether constructing a robot to complete a challenge or programming it to navigate obstacles, students will experience the thrill of innovation and discovery. Students will gain a deeper understanding of engineering principles and the confidence to tackle complex challenges in the ever-evolving world of technology.

EXPLORATORY WORLD LANGUAGES 7

The 7th-grade World Language Exploratory course is designed to introduce students to the basics of learning a foreign language and to foster an appreciation for global cultures and communication. Over the course of the year, students will be exposed to multiple languages and cultures, providing them with the opportunity to explore the sounds, vocabulary, and grammatical structures of different languages. This course is designed to ignite curiosity, broaden students' global perspectives, and help them understand the importance of language learning in a connected world.

MUSIC 7

The 7th-grade General Music course is designed to provide students with a well-rounded exploration to the world of music. This course focuses on developing musical skills, fostering an appreciation for different musical genres, and exploring the cultural significance of music. Students will engage in a variety of activities that include singing, listening, composing, and learning about music theory. By the end of the course, students will have a broader understanding of music and its role in culture, while developing a deeper appreciation for musical expression.

MANUFACTURING 8

In this engaging course, 8th-grade students will explore the fundamentals of manufacturing through hands-on projects that blend creativity, problem-solving, and practical skills. Students will learn about the manufacturing process, from design to production, using tools such as 3D printers, laser cutters, and traditional workshop equipment. They will develop proficiency in using materials and fabrication techniques, and collaborate on projects that simulate real-world manufacturing challenges. Emphasizing safety, teamwork, and innovation, this course provides a foundation in modern manufacturing technologies while fostering critical thinking and a maker mindset. By the end, students will gain valuable experience in product design, prototyping, and production processes, preparing them for future STEM and technical pathways.

ROBOTICS 8

In this hands-on course, 8th-grade students will explore the exciting world of Computer-Aided Design (CAD) and 3D modeling using the innovative PrintLab curriculum. Students will develop essential skills in digital design by creating and refining 3D models, learning how to turn their ideas into reality. Through engaging projects, such as designing everyday objects and solving real-world challenges, students will gain proficiency in 3D modeling software, enhance their problem-solving abilities, and understand the fundamentals of 3D printing. By the end of the course, students will have a solid foundation in CAD, the confidence to create their own designs, and a portfolio of 3D creations. This course fosters creativity, collaboration, and technological literacy, preparing students for future STEM opportunities.

STRATEGIES FOR ACADEMIC SUCCESS 8

This course empowers 8th-grade students with essential tools to enhance their academic success and personal growth. Through interactive lessons and hands-on activities, students will develop key executive functioning skills, including organization, time management, goal setting, and self-regulation. Emphasis will be placed on effective study strategies such as note-taking, active reading, and test preparation techniques. Students will also explore the importance of mindfulness and managing stress. By the end of the course, learners will be equipped with practical strategies to navigate the demands of middle school and beyond confidently.

DRONE SOCCER 8

The Drone Soccer course introduces students to the exciting world of drone technology and sports through a fun and dynamic team-based activity. In this course, students will learn the fundamentals of flying drones and apply those skills to play an innovative and fast-paced game: Drone Soccer. Drone Soccer combines the thrill of competitive sports with cutting-edge technology, where students work together in teams to navigate drones through a large spherical net and score goals. Throughout the course, students will learn how to safely operate drones, practice aerial maneuvers, and develop teamwork, communication, and problem-solving skills. They will also gain an understanding of the science behind drone flight. The course provides hands-on experience in piloting drones, troubleshooting flight issues, and participating in team-based competitions, all while fostering critical thinking and collaboration.

MIDDLE SCHOOL ADVISORY / FOCUS PROGRAM

The Advisory/Focus program is designed to support students in developing essential skills for academic success and personal growth. The course focuses on three key areas: Social Emotional Learning (SEL), executive functioning, and preparation for state exams. Through engaging activities, guided discussions, and targeted practice, students will:

- Build self-awareness, manage emotions, and strengthen interpersonal skills through SEL activities.
- Develop and refine executive functioning skills, including organization, time management, goal-setting, and self-advocacy.
- Prepare for state exams by practicing test-taking strategies, reinforcing core academic skills, and addressing areas of growth.

Participation in this course is an important part of each student's academic journey, and active engagement is expected. Students will receive ongoing feedback and support as they work toward mastering these critical skills.

This course will be graded on a pass/fail basis, which will be reflected on report cards, honor roll eligibility, and transcripts. Success in this advisory program requires consistent participation, effort, and a commitment to personal and academic growth.



NORTHGATE HIGH SCHOOL

GRADUATION REQUIREMENTS

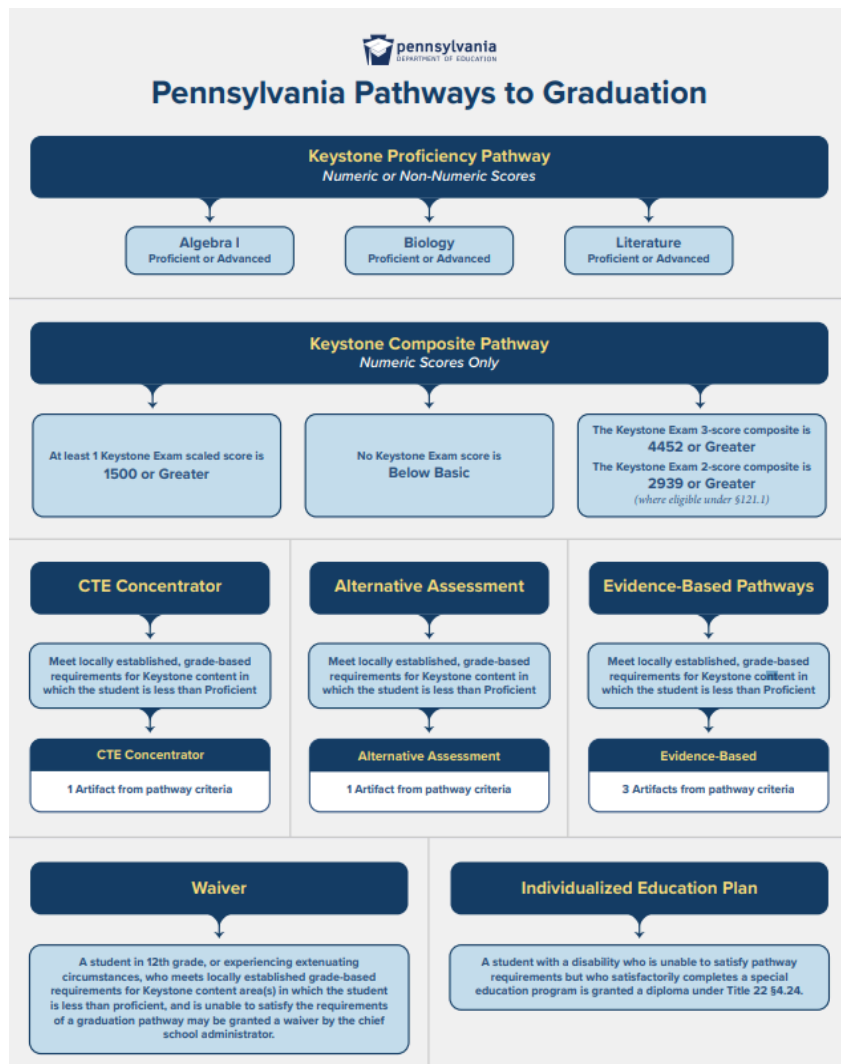
The minimum high school graduation requirements as set forth by the Pennsylvania Department of Education and the Northgate School Board.

Current Grade/Graduation Year	9th 2028	10th 2027	11th 2026	12th 2025
English	4.0	4.0	4.0	4.0
Social Studies / Government	4.0	4.0	4.0	4.0
Mathematics / Algebra*	3.0	3.0	3.0	3.0
Science	3.0	3.0	3.0	3.0
Computer Science Principles or AP Computer Science Principles A	1.0	1.0	1.0	1.0
Business Communications and Personal Finance	1.0	1.0	1.0	0.5
Physical Education	1.0	1.0	1.0	1.0
Health	0.5	0.5	0.5	0.5
CORE COURSE TOTAL	17.5	17.5	17.5	17.0
Electives	7.0	7.0	7.0	7.5
TOTAL	24.5	24.5	24.5	24.5

- *Students may satisfy the Algebra requirement in 8th grade. These students are still required to complete a minimum of 3.0 credits of mathematics coursework during grades 9-12.*
- *Students will be scheduled for a foreign language and Business Communications and Personal Finance and Finance in 9th grade.*

KEYSTONE EXAMS and ACT 158 PATHWAYS

Keystone Exams are end-of-course assessments designed to assess proficiency in 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. Keystone Exams are taken at the end of the semester in which a student is enrolled in the course. Keystone Exams are the statewide assessment Pennsylvania uses to comply with accountability requirements in the federal Every Student Succeeds Act (ESSA). Although students will no longer be required to achieve proficiency on the Keystone Exams in order to meet statewide graduation requirements, students must take the Keystone Exams for purposes of federal accountability. Act 158 of 2018 and Act 6 of 2017 provide alternatives to Pennsylvania’s requirement of attaining proficiency on the Keystone Exams in order to achieve statewide graduation requirements. Effective with the graduating class of 2023, students have the option to demonstrate postsecondary preparedness through one of three additional pathways that more fully illustrate college, career, and community readiness. The Pennsylvania Department of Education requires that student Keystone results are required to be published on a student’s official transcript.



Pathway Criteria

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

NORTHGATE EDUCATION PLAN (NEP)

Student Name:		Mentor:		Career Pathway/Interest: <i>Highlight the courses that will count as your career pathway requirements</i>	
Required Courses For Graduation	9th Grade	10th Grade	11th Grade	12th Grade	Additional Courses <small>(if doubled up within one year)</small>
English (4 credits)					
Social Studies (4 credits)					
Mathematics (3 credits)					
Science (3 credits)					
Business Communications and Personal Finance (1 credits)					
Computer Science Principles or AP Computer Science Principles A (1 credit)					
Physical Education (1 credits)					
Health (0.5 credit)					
Electives (7.0 credits)					
Keystone Exam Proficiency	Algebra		Biology		Literature

GRADING SYSTEM

Percent	Grade	Weighted Grade Points by Course Category	
		Regular Courses	Advanced Placement and CIHS Courses
90 - 100	A	4.0	5.0
80 - 89	B	3.0	4.0
70 - 79	C	2.0	3.0
60 - 69	D	1.0	2.0
59 or below	F	0.0	0.0
* For a student's NGA, Advanced Placement and CIHS Courses are awarded an additional 10 percentage points to a student's final grade.			

STUDENT TRANSCRIPTS

The transcript officially records the student's academic work done while enrolled at Northgate High School. The transcript includes demographic information, lists courses attempted, and the final grade earned for each course. Non-Northgate courses are included and are calculated into the student's final Grade Point Average. 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.

Class Rank is determined by ordering students based upon a cumulative NGA calculated using final weighted grades earned for Northgate School District courses. Both the weighted and unweighted GPA (Grade Point Average) will be published on a student's transcript.

"NGA" stands for "Numeric Grade Average," which refers to the simple average of all numerical grades a student receives in a course or across multiple courses. Essentially, it is the raw average number grade without any letter grade conversion involved. The NGA is a way to express a student's academic performance using a single number on a 100 point scale.

"GPA" stands for "Grade Point Average," which is a calculation that measures a student's academic performance by averaging all of their grades. It is calculated by dividing the total grade points earned by the total number of credits attempted.

CAREER PLANNING

As you enter high school, follow and adjust your Northgate Educational Plan (NEP) to include the required courses in addition to career specific electives that are of interest to you based on your career pathway. Use the course selection sheet as you plan when you would schedule specific courses. Consider transition activities as a capstone to your career pathway, such as work based learning experiences, internships, pre-apprenticeship, dual enrollment opportunities, etc. that are related to your career pathway.

SIXTEEN CAREER CLUSTERS

Career Cluster Area	Description	Pathways
Agriculture, Food & Natural Resources	Production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.	Agribusiness Systems, Animal Systems, Environmental Service Systems, Food Products and Processing Systems, Natural Resources Systems, Plant Systems, Power, Structural and Technical Systems
Architecture & Construction	Careers in designing, planning, managing, building and maintaining the built environment.	Construction, Design/Pre-Construction, Maintenance/Operations
Arts, A/V Technology & Communications	Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.	Audio and Video Technology and Film, Journalism and Broadcasting, Performing Arts, Printing Technology, Telecommunications, Visual Arts
Business, Management & Administration	Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.	Administrative and Information Support, Business Analysis, Business Financial Management and Accounting, Human Resources, Management, Marketing
Education & Training	Planning, managing and providing education and training services, and related learning support services.	Administration and Administrative Support, Professional Support Services, Teaching/Training

Finance	Planning, services for financial and investment planning, banking, insurance, and business financial management.	Banking & Related Services, Business Financial Management, Financial & Investment Planning, Insurance Services
Government & Public Administration	Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.	Foreign Service, Governance, National Security, Planning, Public Management and Administration, Regulation, Revenue and Taxation
Health Science	Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.	Biotechnology Research and Development, Diagnostic Services, Health Informatics, Support Services, Therapeutic Services
Hospitality & Tourism	Management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.	Lodging, Recreation, Amusements & Attractions, Restaurants and Food/Beverage Services, Travel & Tourism
Human Services	Preparing individuals for employment in career pathways that relate to families and human needs.	Consumer Services, Counseling & Mental Health Services, Early Childhood Development & Services, Family & Community Services, Personal Care Services
Information Technology	Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.	Information Support and Services, Interactive Media, Network Systems, Programming and Software Development
Law, Public Safety & Security	Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.	Correction Services, Emergency and Fire Management Services, Law Enforcement Services, Legal Services, Security & Protective Services
Manufacturing	Planning, managing and performing the processing of materials into	Health, Safety and Environmental Assurance, Logistics & Inventory

	intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.	Control, Maintenance, Installation & Repair, Manufacturing Production Process Development, Production, Quality Assurance
Marketing, Sales & Service	Planning, managing, and performing marketing activities to reach organizational objectives.	Buying and Merchandising, Distribution and Logistics, E-Marketing, Management and Entrepreneurship, Marketing Communications and Promotion, Marketing Information Management and Research, Professional Sales and Marketing
Science, Technology, Engineering & Mathematics	Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.	Engineering and Technology, Science and Math
Transportation, Distribution & Logistics	Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.	Facility and Mobile Equipment Maintenance, Health, Safety and Environmental Management , Logistics Planning and Management Services, Sales and Service, Transportation Operations, Transportation Systems/Infrastructure Planning, Management, and Regulation , Warehousing and Distribution Center Operations

The following pages have the descriptions of careers and courses that correspond with the major career clusters.

Students are encouraged to use these pages to help map out and plan course selections for 9th grade and beyond by creating your personal Northgate Education Plan (NEP).

It is okay if you are unsure what you want to do for the rest of your life. Use the Career Cluster information you have learned and speak with your school counselor, administrator, or trusted adult if you have questions.

Agriculture, Food & Natural Resources	Architecture & Construction	Arts, A/V Technology & Communications	Business, Management & Administration
Career Possibilities			
<p>Occupations Requiring Postsecondary Education</p> <ul style="list-style-type: none"> ▶ Agricultural Chemical Dealer ▶ Aquaculturist ▶ Bank/Loan Office ▶ Environmental Compliance Assurance Manager ▶ Equine Manager ▶ Farm Manager ▶ Health and Safety Sanitarian ▶ Meat Cutter-Meat Grader ▶ Park Manager ▶ Produce Buyer ▶ Recycling Technician ▶ Wildlife Manager <p>Occupations Requiring Baccalaureate Degree</p> <ul style="list-style-type: none"> ▶ Agricultural Educator ▶ Botanist ▶ Ecologist ▶ Environmental Engineer ▶ Fish and Game Officer ▶ Plant Pathologist ▶ Veterinarian 	<ul style="list-style-type: none"> ▶ Carpenter Code Official ▶ Concrete Finisher Construction ▶ Engineer Construction ▶ Foreman/Manager ▶ Construction Inspector ▶ Contractor Design Builder ▶ Drywall Installer Electrician ▶ Electronic Systems Technician ▶ Equipment and Material ▶ Manager General ▶ Contractor/Builder Heating, Refrigeration and Mechanical ▶ Mason Painter Paperhanger ▶ Plumber Project Estimator ▶ Project Inspector Project ▶ Manager Roofer Safety Director ▶ Sheet Metal Worker Specialty ▶ Contractor Superintendent Tile and Marble Setter 	<ul style="list-style-type: none"> ▶ Actor ▶ Audio-Video Designer and Engineer ▶ Broadcast Technician ▶ Commercial Artist ▶ Computer Animator ▶ Curator/Gallery Manager ▶ Director and Coach ▶ Fashion Designer ▶ Journalist ▶ Lithographer ▶ Musician ▶ Printing Equipment Operator ▶ Telecommunication Technician ▶ Videographer ▶ Web Page Designer 	<ul style="list-style-type: none"> ▶ Administrative Assistant ▶ Advertising Sales Person ▶ Auditor ▶ Business Consultant ▶ Certified Public Accountant ▶ Corporate Trainer ▶ E-Commerce Analyst ▶ Entrepreneur ▶ Facilities Manager ▶ Finance Director ▶ Human Resources Manager ▶ Investment Executive ▶ Marketing Analyst ▶ Medical Transcriptionist ▶ Office Manager ▶ OSHA/ADA Compliance Officer ▶ Personnel Recruiter ▶ Public Relations Manager ▶ Sales Representative ▶ Wholesale and Retail Buyer
Northgate Course Offerings			
<p>CIHS AP Statistics</p> <p>Science 9</p> <p>Biology</p> <p>CIHS AP Biology</p> <p>Conservation Science</p> <p>Marine Biology</p> <p>CIHS Physics</p> <p>CIHS AP Physics C</p> <p>CIHS Chemistry</p> <p>CIHS AP Chemistry</p> <p>CIHS Anatomy / Physiology</p> <p>Genetics</p> <p>CIHS Human Geography</p> <p>Anthropology</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Entrepreneurship</p>	<p>Algebra 1</p> <p>CIHS Algebra II</p> <p>Geometry</p> <p>AP Pre-Calculus</p> <p>CIHS AP Calculus</p> <p>CIHS AP Statistics</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Entrepreneurship</p> <p>Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p> <p>CIHS Physics</p> <p>CIHS AP Physics C</p> <p>CIHS Chemistry</p> <p>CIHS AP Chemistry</p> <p>Robotics</p>	<p>English 1</p> <p>English 2</p> <p>CIHS English 3</p> <p>CIHS English 4</p> <p>CIHS AP Literature and Composition</p> <p>CIHS AP Language and Composition</p> <p>French 1-3</p> <p>Spanish 1-3</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p> <p>Studio Arts 2-4</p> <p>Marching Band</p> <p>Concert Band</p> <p>Concert Choir</p> <p>Journalism & Media</p>	<p>English 1</p> <p>English 2</p> <p>CIHS English 3</p> <p>CIHS English 4</p> <p>CIHS AP Language and Composition</p> <p>CIHS Theories of Leadership</p> <p>Algebra 1</p> <p>CIHS Algebra II</p> <p>CIHS AP Statistics</p> <p>Economics</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Entrepreneurship</p> <p>Graphic Design</p>

Education & Training	Finance	Government & Public Administration	Health Science
Career Possibilities			
<ul style="list-style-type: none"> ▶ Administrator ▶ Assessment Specialist ▶ CareerTech Administrator ▶ Child Care Worker ▶ Clinical Psychologist ▶ Coach ▶ College/University Faculty ▶ Counselor ▶ Curriculum Developer ▶ Elementary Teacher ▶ High School Teacher ▶ Middle School Teacher ▶ Principal ▶ Speech-Language Pathologist 	<ul style="list-style-type: none"> ▶ Abstractor ▶ Accountant ▶ Actuary ▶ Bill and Account Collector ▶ Commodities Representative ▶ Controller ▶ Credit Analyst ▶ Debt Counselor ▶ Economist ▶ Financial Planner ▶ Foreign Exchange Manager ▶ Fundraiser ▶ Insurance Broker ▶ Internal Auditor ▶ Loan Officer ▶ Non-Profit Manager ▶ Tax Examiner ▶ Title Researcher and Examiner ▶ Treasurer ▶ Trust Officer ▶ Underwriter 	<ul style="list-style-type: none"> ▶ Ambassador ▶ Bank Examiner ▶ City Manager ▶ Combat Control Officer ▶ Commissioner ▶ Cryptographer ▶ Election Supervisor ▶ Elected Official ▶ Foreign Service Officer ▶ Immigration Officer ▶ Intelligence Analyst ▶ Internal Revenue Investigator ▶ Lobbyist ▶ National Security Advisor ▶ Planner ▶ Policy Advisor ▶ Tax Policy Analyst 	<p>Occupations Requiring Less than Baccalaureate Degree</p> <ul style="list-style-type: none"> ▶ Dental Assistant/Hygienist ▶ EMT/Paramedic ▶ Health Information Coder ▶ Home Health Aide ▶ Lab Technician ▶ Phlebotomist ▶ Radiographer ▶ Registered Nurse <p>Occupations Requiring Baccalaureate Degree</p> <ul style="list-style-type: none"> ▶ Athletic Trainer ▶ Biochemist ▶ Biostatistician ▶ Geneticist ▶ Industrial Hygienist ▶ Nutritionist ▶ Occupational Therapist ▶ Physician (MD/DO) ▶ Physician's Assistant ▶ Psychologist ▶ Radiologist ▶ Research Scientist ▶ Speech/Language Pathologist ▶ Toxicologist ▶ Veterinarian
Northgate Course Offerings			
<p>English 1 English 2 CIHS English 3 CIHS English 4 CHIS AP Literature and Composition CIHS AP Language and Composition CIHS AP Statistics</p> <p>Biology CIHS AP Biology CIHS Chemistry CIHS AP Chemistry CIHS Physics CIHS AP Physics C CIHS Anatomy / Physiology Genetics</p> <p>French 1-3 Spanish 1-3 Health CIHS Computer Science Principles Business Communications and Personal Finance Graphic Design Journalism & Media</p>	<p>Algebra 1 CIHS Algebra II Geometry CIHS AP Precalculus CIHS AP Statistics CIHS AP Calculus</p> <p>Economics CIHS Computer Science Principles Business Communications and Personal Finance</p>	<p>English 1 English 2 CIHS English 3 CIHS English 4 CIHS AP Language and Composition CIHS Theories of Leadership CIHS AP Statistics</p> <p>Economics CIHS Government American Studies 1 and 2 French 1-3 Spanish 1-3 CIHS Computer Science Principles Business Communications and Personal Finance Robotics</p>	<p>Algebra 1 CIHS Algebra II CIHS AP Precalculus CIHS AP Statistics CIHS AP Calculus</p> <p>Biology CIHS AP Biology Conservation Science Marine Biology CIHS Physics CIHS AP Physics C CIHS Chemistry CIHS AP Chemistry CIHS Anatomy / Physiology Genetics</p> <p>Health Physical Education CIHS Computer Science Principles Business Communications and</p>

Hospitality & Tourism	Human Services	Information Technology	Law, Public Safety & Security
Career Possibilities			
<ul style="list-style-type: none"> ▶ Baker ▶ Bartender ▶ Casino Manager ▶ Caterer ▶ Concierge ▶ Convention Services Manager ▶ Director of Operations - Lodging ▶ Director of Tourism Development ▶ Event Planner ▶ Executive Chef ▶ Facilities Manager ▶ Maitre d' ▶ Museum Director ▶ Reservations Manager ▶ Restaurant Owner/Manager ▶ Sports Promoter ▶ Theme Park Manager ▶ Tour and Travel Guide ▶ Travel Agent ▶ Wine Steward 	<ul style="list-style-type: none"> ▶ Buyer ▶ Certified Financial Planner ▶ Community Service Director ▶ Consumer Advocate ▶ Cosmetologist ▶ Director of Childcare Facility ▶ Emergency and Relief Worker ▶ Esthetician ▶ Funeral Director ▶ Licensed Professional Counselor ▶ Market Researcher ▶ Massage Therapist ▶ Personal Fitness Trainer ▶ School Counselor/Psychologist ▶ Small Business Owner ▶ Social Worker 	<ul style="list-style-type: none"> ▶ Animator ▶ Database Administrator ▶ Data Systems Designer ▶ E-Business Specialist ▶ Game Developer ▶ Information Technology Engineer ▶ Media Specialist ▶ Network Administrator ▶ Network Security Analyst ▶ PC Support Specialist ▶ Programmer ▶ Software Applications Specialist ▶ Systems Administrator ▶ Telecommunications Network Technician ▶ User Support Specialist ▶ Virtual Reality Specialist ▶ Web Architect/Designer 	<ul style="list-style-type: none"> ▶ Attorney ▶ Bomb Technician ▶ Corrections Officer ▶ Court Reporter ▶ Criminal Investigator ▶ EMT ▶ Federal Marshall ▶ Firefighter ▶ Gaming Surveillance Specialist ▶ Hazardous Materials Responder ▶ Loss Prevention Specialist ▶ Paralegal ▶ Park Ranger ▶ Police and Patrol Officer ▶ Probation/Parole Officer ▶ Public Information Officer ▶ Security Director ▶ Youth Services Worker
Northgate Course Offerings			
<p>CIHS Theories of Leadership CIHS AP Statistics</p> <p>Economics</p> <p>French 1-3 Spanish 1-3</p> <p>CIHS Computer Science Principles Business Communications and Personal Finance</p> <p>Graphic Design Marketing Entrepreneurship Journalism & Media</p>	<p>English 1 English 2 CIHS English 3 CIHS English 4 CIHS AP Literature and Composition CIHS AP Language and Composition CIHS AP Statistics</p> <p>Biology CIHS AP Biology CIHS Chemistry CIHS AP Chemistry CIHS Anatomy / Physiology Genetics Economics</p> <p>French 1-3 Spanish 1-3 Health CIHS Computer Science Principles Business Communications and Personal Finance</p>	<p>Algebra 1 CIHS Algebra II Geometry CIHS AP Precalculus CIHS AP Statistics CIHS AP Calculus</p> <p>CIHS Computer Science Principles Business Communications and Personal Finance Making Cool Stuff Innovative Design 1-3 Graphic Design</p>	<p>English 1 English 2 CIHS English 3 CIHS English 4 CIHS AP Literature and Composition CIHS AP Language and Composition CIHS Theories of Leadership CIHS AP Statistics</p> <p>CIHS Government American Studies 1 and 2 CIHS Computer Science Principles Business Communications and Personal Finance CIHS Chemistry CIHS AP Chemistry CIHS Physics CIHS AP Physics C</p>

Manufacturing	Marketing, Sales & Service	Science, Technology, Engineering & Mathematics	Transportation, Distribution & Logistics
Career Possibilities			
<ul style="list-style-type: none"> ▶ Assembler ▶ Boilermaker ▶ Design Engineer ▶ Environmental Engineer ▶ Foundry Worker ▶ Freight, Stock and Material Mover ▶ Health and Safety Representative ▶ Industrial Machinery Mechanic ▶ Inspector ▶ Labor Relations Manager ▶ Logistician ▶ Manufacturing Technician ▶ Pattern and Model Maker ▶ Production Manager ▶ Quality Control Technician ▶ Safety Engineer ▶ SPC Coordinator ▶ Tool and Diemaker ▶ Traffic Manager ▶ Welder 	<ul style="list-style-type: none"> ▶ Copywriter/Designer ▶ E-Commerce Director ▶ Entrepreneur ▶ Field Marketing Representative ▶ Forecasting Manager ▶ Interactive Media Specialist ▶ Inventory Manager/Analyst ▶ Logistics Manager ▶ Merchandise Buyer ▶ On-line Market Researcher ▶ Public Relations Manager ▶ Promotions Manager ▶ Retail Marketing Coordinator ▶ Sales Executive ▶ Shipping/Receiving Clerk ▶ Telemarketer ▶ Trade Show Manager ▶ Warehouse Manager ▶ Webmaster 	<ul style="list-style-type: none"> ▶ Aerospace Engineer ▶ Agricultural Engineer ▶ Analytical Chemist ▶ Anthropologist ▶ Architectural Engineer ▶ Astrophysicist ▶ Biomedical Engineer ▶ CAD Technician ▶ Civil Engineer ▶ Computer Programmer ▶ Ecologist ▶ Geologist ▶ Geothermal Engineer ▶ Math Teacher ▶ Mathematician ▶ Metallurgist ▶ Statistician ▶ Survey Technician ▶ Zoologist 	<ul style="list-style-type: none"> ▶ Airplane Pilot/Co-Pilot ▶ Air Traffic Controller ▶ Avionics Technician ▶ Cargo and Freight Agent ▶ Customs Inspector ▶ Environmental Manager ▶ Facility Engineer ▶ Industrial Equipment Mechanic ▶ Industrial and Packaging Engineer ▶ International Logistics Specialist ▶ Locomotive Engineer ▶ Marine Captain ▶ Port Manager ▶ Safety Analyst ▶ Storage and Distribution Manager ▶ Transportation Manager ▶ Truck Driver ▶ Urban and Regional Planner ▶ Warehouse Manager
Northgate Course Offerings			
<p>CIHS Theories of Leadership</p> <p>Algebra 1</p> <p>CIHS Algebra II</p> <p>Geometry</p> <p>CIHS AP Statistics</p> <p>Economics</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p> <p>CIHS Chemistry</p> <p>CIHS AP Chemistry</p> <p>CIHS Physics</p> <p>CIHS AP Physics C</p>	<p>English 1</p> <p>English 2</p> <p>CIHS English 3</p> <p>CIHS English 4</p> <p>Algebra 1</p> <p>CIHS Algebra II</p> <p>CIHS AP Statistics</p> <p>Economics</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p>	<p>Algebra 1</p> <p>CIHS Algebra II</p> <p>Geometry</p> <p>CIHS AP Precalculus</p> <p>CIHS AP Statistics</p> <p>CIHS AP Calculus</p> <p>Biology</p> <p>CIHS AP Biology</p> <p>Conservation Science</p> <p>Marine Biology</p> <p>CIHS Physics</p> <p>CIHS AP Physics C</p> <p>CIHS Chemistry</p> <p>CIHS AP Chemistry</p> <p>CIHS Anatomy / Physiology</p> <p>Genetics</p> <p>Health</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p> <p>Aviation I and II</p>	<p>Algebra 1</p> <p>CIHS Algebra II</p> <p>Geometry</p> <p>CIHS AP Precalculus</p> <p>CIHS AP Statistics</p> <p>CIHS AP Calculus</p> <p>Economics</p> <p>CIHS Computer Science Principles</p> <p>Business Communications and Personal Finance</p> <p>Making Cool Stuff</p> <p>Materials and Fabrication 1-3</p> <p>Innovative Design 1-3</p> <p>CIHS Physics</p> <p>CIHS AP Physics C</p> <p>CIHS Chemistry</p> <p>CIHS AP Chemistry</p> <p>Aviation I and II</p>

COLLEGE IN HIGH SCHOOL PROGRAM

In partnership with local colleges and universities, Northgate High School is excited to offer eligible high school students an opportunity to earn college credits. Northgate High School courses have been analyzed to ensure that Northgate High School students will have the opportunity to engage in a fully enriched curriculum that prepares them for college and career success.

Students interested in earning dual enrollment credit should register for Northgate's College in High School (CIHS) program courses. Each course has its own set of eligibility guidelines to ensure that students are prepared for the rigorous expectations of college-level work. Northgate instructors will provide enrollment information to students during spring registration or at the start of each course.

For most courses, there will be fees for tuition in order to earn credits. Costs cover all registration fees and access to technology and academic support resources. The cost of each course is set annually by each college or university. Discounted pricing for Northgate High School students is available only to students enrolled in the CIHS program and for classes taught onsite at Northgate. These courses earn credits that can be transferred to most colleges and universities across the country. Payment is due to the university or college that corresponds with each course at the time of registration.

The relationship between Northgate School District and local colleges and universities offers exceptional access to top-notch college-level academics, and it is our hope that all Northgate High School students will take advantage of this exciting opportunity!

Sincerely,

Dr. Caroline Johns

NORTHGATE CREDIT-BEARING DUAL ENROLLMENT COURSES

ENGLISH DEPARTMENT

NORTHGATE TEACHER	NORTHGATE COURSE	ROBERT MORRIS UNIVERSITY COURSE
Mrs. Egger	CIHS English 3	CSEN 1010 “Reading and Writing Strategies”
Mrs. Mignella	CIHS English 4	ENGL 1040 “Reading Literature: Coming of Age”
Mrs. Egger	A.P. Language & Composition	CSEN 1020 “Argument and Research”
Mr. Smith	A.P. Literature & Composition	ENGL 1050 “Classic and Modern Literature”
NORTHGATE TEACHER	NORTHGATE COURSE	THE UNIVERSITY OF PITTSBURGH COURSE
Mr. Smith	CIHS Theories of Leadership	LDRSHP 1100 “Theories of Leadership”

HISTORY DEPARTMENT

NORTHGATE TEACHER	NORTHGATE COURSE	ROBERT MORRIS UNIVERSITY COURSE
Mr. Hogle	CIHS Human Geography	GEOG 1020 “World Geography”
Mr. Michalow	CIHS Government	POLS 1020 “American National Government”
Mr. Michalow	CIHS AP European History	HIST 2600: “Modern European History”
NORTHGATE TEACHER	NORTHGATE COURSE	CARLOW UNIVERSITY
Mr. Michalow	AP US History	HS 170 “US History Prior to 1865”
Mr. Michalow	AP US History	HS 171 “US History After 1865”

MATH DEPARTMENT

NORTHGATE TEACHER	NORTHGATE COURSE	CARLOW UNIVERSITY COURSE
Mr. Veshio	CIHS Algebra II	MAT110 “College Algebra”
Mr. Veshio	AP Precalculus	MAT150 “Pre-Calculus”
Mr. Veshio	AP Statistics	MAT115 “Applied Statistics”
Mr. Veshio	AP Calculus	MAT160 “Calculus 1”

SCIENCE DEPARTMENT

NORTHGATE TEACHER	NORTHGATE COURSE	CARLOW UNIVERSITY COURSE
Mrs. Malm	CIHS / AP Chemistry	CHM 111 “General Chemistry 1 Lecture”/ CHM113 “Lab”
Mr. Donini	CIHS Anatomy and Physiology	BIO 201 “Anatomy and Physiology I”
Mr. Donini	CIHS / AP Biology	BIO 120 “Foundations of Molecular and Cell Biology”
NORTHGATE TEACHER	NORTHGATE COURSE	ROBERT MORRIS UNIVERSITY COURSE
Ms. Cole	CIHS / AP Physics	PHYS 1210 “General Physics I” and PHYS 1215 “General Physics Lab”

BUSINESS DEPARTMENT

NORTHGATE TEACHER	NORTHGATE COURSE	ROBERT MORRIS UNIVERSITY COURSE
Mrs. Wertheimer	CIHS Computer Science	INFS 1020 “Fundamentals of Informational Technology”
Mrs. Wertheimer	AP Computer Science A	INFS 2151 “Programming I”

We continually seek opportunities for dual enrollment courses, and many of these offerings are contingent upon our partnerships. The list of courses offered is subject to change

NORTHGATE HIGH SCHOOL COURSES

ENGLISH

ENGLISH 1 1 Credit

English 1 will provide a foundation for skills that will be built upon in the later English courses. The students will experience and work with various genres of literature (fiction, non-fiction, and poetry), literary elements, and media related to the literature. Approximately three to four research-based projects and presentations, including a formal research paper, are required. These projects are completed in coordination with the American Studies I class. Students will be assessed through quizzes/tests, assignments, projects, writings, and class participation. Upon successful completion of this course, students will complete the Keystone Literature Exam.

ENGLISH 21 Credit

Students will develop the discipline and techniques necessary for effective writing through concentration on the development of ideas, clarity of expression, and correct grammar. Both fiction and nonfiction texts will be examined throughout the course. Stress will be placed on learning to respond orally and in writing to all genres of literature, including several novels within the course of the year.

CIHS ENGLISH 3.....1 Credit / 3 RMU Credits

This course introduces students to college-level, academic writing and the purpose of the course is to prepare students for college and careers. Emphasis is placed on critical analysis, argumentation, intellectual integrity and revision. Through the writing process, students will refine arguments; develop and support ideas; investigate, evaluate, and integrate appropriate sources; revise and edit for effective style and usages; and develop an awareness of the variety of contexts, audiences, and purposes of academic writing. Each unit of study has an overarching essential question which the students examine intensely with a formal writing assignment and a creative, competitive project at the conclusion of each unit. Students have class time to complete tasks, however, the course is demanding in areas of critical thinking, collaboration, time management, reading skills, writing skills, and speaking and listening skills.

CIHS ENGLISH 4.....1 Credit / 3 RMU Credits

This course is a survey course of literature. The course challenges students to interpret, analyze and synthesize literature through discussion, creative projects, and critical essays. Students continue to enhance their core communication skills as developed throughout their academic careers. Students in this course will practice their composition skills in response to selected works of literature. English 4 provides a supportive environment including in-class workshops, drafting opportunities and peer-to-peer evaluations so that students may demonstrate proficiency in their reading and writing skills. Students have the opportunity to increase the depth of their global cultural awareness, and examine global literary perspectives and traditions which gives students an opportunity for discussion and a deeper understanding of other cultures. The primary objective of this course is to give students the opportunity to develop an understanding of the richness of global diversity through a study of some of the world's finest literature.

CIHS AP LANGUAGE AND COMPOSITION.....1 Credit / 3 RMU Credits

Prerequisite:Advanced/Proficient achievement on the Keystone Literature Exam

AP English Language focuses on rhetoric. Students will study language as a persuasive tool and examine the integral relationships of writer, context, audience, and argument. The course is centered on nonfiction works. Techniques of diction, syntax, imagery, and tone are studied in order to better understand the nature of argumentation. Students should be able to read complex texts with understanding and write in a manner that explores ideas, reconsiders strategies, and emphasizes revision of drafts. Students will write formally and informally through revised essays, journals, collaborative writing, and in-class responses as well as produce expository and argumentative compositions that introduce complex ideas developed through cogent and sustained reasoning. All students will be encouraged to take the Advanced Placement Exam.

CIHS AP LITERATURE AND COMPOSITION1 Credit/ 3 RMU Credits

Prerequisite:Advanced/Proficient achievement on the Keystone Literature Exam

AP Literature is an accelerated program designed for students who are passionate about literature. It is an intensive study of literature and composition intended to simulate freshman college English courses and, in doing so, better prepare the student to meet the requirements of college work. The literature segment of the course draws materials from the entire range of world literature and develops the student's critical and analytical skills. The composition segment familiarizes the student with the various modes of discourse and the techniques and disciplines needed to write on a college level. All students will be encouraged to take the Advanced Placement Exam.

CIHS THEORIES OF LEADERSHIP1 Credit/ 3 Pitt Credits

The course is designed to acquaint students with multiple theories and practices associated with effective leadership. In answering the question, "What is leadership?" It examines such theories as situational, participative, transformational, and servant leadership. Consideration is given to issues of followership and the many roles we play in life. The course also addresses leadership and administrative skills and practices usually associated with effective professional management.

JOURNALISM AND MEDIA1 Credit

Journalism and Media is designed to give students the knowledge and skills they need to become multimedia news professionals. Journalists and other professional communicators today must be familiar with creating news content in a variety of forms. This course combines principles of multimedia storytelling with hands-on learning activities. Before each technology is introduced, students will learn the principles and goals involved in creating interesting, professional stories. Students will learn the practical elements of using the technology and produce a newsworthy story.

KEYSTONE FOCUSED ENGLISH LANGUAGE ARTS.....1 Credit

In order to graduate from high school, students in Pennsylvania are required to demonstrate proficiency on the Algebra 1, Literature, and Biology Keystone Exams. Students are offered these exams multiple times and can retake them if scoring is insufficient. Within this course, the content is offered adaptively, based on individual assessment outcomes. Visual indicators show students at a glance where they are and what areas need improvement.

MATHEMATICS

ALGEBRA I 1 Credit

Algebra I is aligned to the Pennsylvania Algebra I standards and includes the following topics: Operations with Real Numbers and Expressions, Linear Equations, Linear Inequalities, Functions, Factoring Algebraic Expressions, Coordinate Geometry, and Data Analysis. Students will also learn to model real-world situations using functions in order to solve problems arising from those situations. Students will begin to become proficient with a graphing calculator and its use throughout this course. The course is structured to prepare students for the Keystone Algebra I Exam.

GEOMETRY..... 1 Credit

Prerequisite: Successful completion of Algebra I

In geometry, students will develop reasoning and problem solving skills as they study topics such as congruence and similarity, and apply properties of lines, triangles, quadrilaterals, and circles. Students will develop problem solving skills by using length, perimeter, area, circumference, surface area, and volume to solve real-world problems. Technology support for both learning geometry and preparing for standardized tests will be available in the form of online and multimedia content.

GEOMETRY W/ALGEBRA TOPICS 1 Credit

Geometry with Algebra Topics is a rigorous course with a wide scope. In the first half of the course, students will continue to investigate algebraic topics developed in the previous course. These topics include but are not limited to linear equations, the real number system, exponents, scientific notation, patterns, and inequalities. In the second half of the course, students will focus on geometric topics. These topics include but are not limited to polygons, parallels, triangle congruence, similarity, volume, and surface area.

CIHS ALGEBRA II 1 Credit / 3 Carlow Credits

Prerequisite: Successful completion of Algebra I

Algebra II begins with an introduction to functions. This will be followed by an in-depth study of functions including linear, quadratic, polynomial, exponential, logarithmic, rational, radical, and piecewise functions. Students will explore solutions of systems of equations in two and three variables. The course will conclude with a study of probability and statistics and an exploration of sequences and series. Students must be able to apply what they have learned in class to various types of word problems.

CIHS AP PRECALCULUS..... 1 Credit / 3 Carlow Credits

Prerequisite: Successful completion of Algebra II

Prerequisite: Advanced/Proficient achievement on the Keystone Algebra Exam

AP Precalculus is a college-level course designed to prepare students for the study of calculus and other higher-level mathematics. The course integrates concepts from algebra, geometry, and trigonometry to provide a solid foundation for future mathematical endeavors. Throughout the semester, students will explore key topics including; Trigonometry, Functions and their Properties, and

Complex Numbers. The course provides a coherent capstone experience and students will acquire and apply mathematical tools in real-world situations.

CIHS AP STATISTICS..... 1 Credit / 3 Carlow Credits

Prerequisite: Successful completion of Algebra II

Prerequisite: Advanced/Proficient achievement on the Keystone Algebra Exam

AP Statistics is a college-level course introducing students to the principles and methods of collecting, analyzing, and interpreting data. The course covers key topics such as probability, statistical inference, hypothesis testing, regression analysis, and sampling techniques. Students will explore real-world applications of statistics, using data to make informed decisions and solve problems across a variety of fields. Emphasis is placed on understanding concepts and interpreting results rather than on complex calculations, with students using technology to assist in data analysis. Throughout the course, students will develop critical thinking skills as they learn how to assess data quality, design surveys and experiments, and draw meaningful conclusions.

CIHS AP CALCULUS 1 Credit / 4 Carlow Credits

Prerequisite: Successful completion of AP Precalculus

Prerequisite: Advanced/Proficient achievement on the Keystone Algebra Exam

AP Calculus AB is a rigorous, college-level mathematics course that introduces students to the concepts of differential and integral calculus. The course focuses on understanding limits, derivatives, integrals, and the Fundamental Theorem of Calculus, with an emphasis on their applications in real-world contexts. Students will learn to analyze functions through various methods, including graphical, numerical, and analytical approaches, and will explore topics such as rates of change, optimization, and the accumulation of quantities. Problem-solving techniques, mathematical modeling, and the use of technology are essential components of the course, as students work through complex problems and develop a deeper understanding of calculus. In addition to theoretical knowledge, the course promotes the development of critical thinking and analytical skills, preparing students for advanced mathematical study.

SCIENCE

SCIENCE 9 1 Credit

This course will be taken by incoming 9th grade students. The course will examine science topics through connected themes and concepts. All students will study with a focus on laboratory skills, inquiry, and scientific writing. Students will rotate through three unique science topics with different members of the Science department in order to be introduced to a variety of interconnected content and prepare for future opportunities and science courses.

BIOLOGY 1 Credit

Prerequisite: Successful completion Science 9 or faculty recommendation

Biology is a required course for all students and is aligned to the Pennsylvania Keystone Biology standards. Areas of study will include Cell Biology, Molecular Biology, Biochemistry, Evolution, Genetics, and the Diversity of Life among Kingdoms. Lab investigations will be used to reinforce key topics. Group and individual projects that stress critical thinking will be required. Projects will be assigned regularly. Scientific writings and readings are required. Class periods are devoted to labs, inquiry observations, and scientific methodology. Upon successful completion of this course, students will complete the Keystone Biology Exam.

CIHS AP BIOLOGY 1 Credit / 4 Carlow Credits

Prerequisite: Advanced/Proficient achievement on the Keystone Biology Exam

Students planning to take AP Biology are strongly encouraged to take Chemistry. The course is taught in a lecture/discussion format. Students are encouraged and expected to discuss the material being presented. The discussion most frequently takes the form of questions of clarification and contributions the students have to the subject being discussed. Labs will be included throughout the semester. Topics include: Cells, Transport, Biochemistry, Cell Communication, Gene Expression, Ecology, Natural Selection, and Energy.

KEYSTONE FOCUSED BIOLOGY1 Credit

In order to graduate from high school, students in Pennsylvania are required to demonstrate proficiency on the Algebra 1, Literature and Biology Keystone Exams. Students are offered these exams multiple times and can retake them if scoring is insufficient. Within this course, Biology content is offered adaptively, based on individual assessment outcomes. Visual indicators show students at a glance of their current Biology skills and what areas of Biology are in need improvement.

CHEMISTRY 1 Credit

Prerequisite: Successful completion of Science 9 or faculty recommendation

This is an introductory Chemistry course, incorporating the concepts of chemical periodicity, reactivity, and structure. Using a combination of lecture, laboratory, and discussion sections, students will be exposed to the fundamental concepts in Chemistry: dimensional analysis, classification of matter, periodic table, molar and stoichiometric relationships, nuclear chemistry, aqueous chemistry, and organic chemistry. This course is strongly recommended for students who are interested in taking AP Chemistry.

CIHS AP CHEMISTRY 1 Credit / 4 Carlow Credits

Prerequisite: Successful completion of CIHS Chemistry

Prerequisite: Advanced/Proficient achievement on the Keystone Biology Exam

Ap Chemistry includes topics in the structure of matter, kinetic theory of gasses, chemical kinetics, chemical equilibrium, oxidation and reduction, acids and bases, molecular geometry, solutions, basic thermodynamics, nuclear- and electro-chemistry. Laboratory work is an important part of the course and students will work individually rather than in pairs. All students will be encouraged to take the Advanced Placement Exam.

PHYSICS 1 Credit

Prerequisite: Successful completion of Science 9 or faculty recommendation

This course is an introduction to physics and is designed to meet the demands of the Algebra-based AP Physics I syllabus as published by the College Board. The goal is to provide students with an experience equivalent to an introductory university-level algebra-based physics course. Students are expected to have a firm understanding of algebra and a working knowledge of trigonometry. Topics include methods of measurement, problem-solving techniques, and the physical concepts of motion, forces, work and energy, electricity, waves and optics. Students will be assessed on their ability to problem solve, use algebra to solve basic physics problems, complete project work, and applying theoretical concepts and mathematical interpretation in the conduction of laboratory experiments. Students will be prepared to take the AP Physics I exam at the end of the year if they opt to do so.

CIHS AP PHYSICS C 1 Credit / 4 RMU Credits

Prerequisites: Successful completion of Algebra II and CIHS Physics or Faculty Recommendation

Prerequisite: Advanced/Proficient achievement on the Keystone Biology Exam

AP Physics C is a college-level course that provides an in-depth exploration of classical mechanics and electricity and magnetism. This course is designed for students who have a strong foundation in mathematics and physics and are interested in pursuing careers in science, engineering, or other STEM fields. Through rigorous problem-solving and experimental work, students will develop a deep understanding of physical principles and the ability to apply them to real-world situations. Students will engage in hands-on laboratory experiments to test and apply the theories they learn, gaining practical experience in experimental physics and data analysis. All students will be encouraged to take the Advanced Placement Exam.

CIHS ANATOMY/PHYSIOLOGY 1 Credit / 4 Carlow Credits

Prerequisite: Advanced/Proficient achievement on the Keystone Biology Exam

Anatomy and Physiology is a course designed to better familiarize students with the scientific concept of bodily functions and the causes and effects of these functions. The content includes the body as a whole; skeletal, connective tissue, muscular, nervous, digestive, excretory, circulatory, endocrine, reproductive, immune and sensory systems, and growth and development. Course content is detailed and technical. Students who have future plans related to the medical field should consider this course. Others who have a keen interest in learning about themselves and how the basic processes of life proceed are encouraged to consider this demanding program. Scientific inquiry studies are incorporated into dissection labs including sheep's eye, bovine heart, sheep's nervous system and lab activities including, blood pressure, blood typing, and detailed microscope activities.

CONSERVATION SCIENCE 1 Credit

Prerequisite: Successful completion of Science 9

Conservation Science is available for 11th and 12th grade students. The course introduces students to Pennsylvania wildlife biology and conservation efforts in North America. Ecology and wildlife management are discussed. Students will study the basic morphology and population dynamics of various organisms. Game laws and the Endangered Species Act gives students a perspective on local and global ramifications of wildlife biology. Emphasis is placed on identification and classification of Pennsylvania wildlife species and their habitats. Classroom studies are combined with labs and field studies. Classes will be conducted outside throughout the year and proper clothing is required on those days. Topics to be studied include; Conservation, Private and Public Lands, Upland Birds, Waterfowl, Ungulates, Hunting and Conservation, Hunting Regulations, Hunting Skills, Game Processing, Fishing, Aquatic species, Fly fishing, Trapping and Conservation, and Boating and Conservation.

MARINE BIOLOGY/GENETICS..... 1 Credit

Prerequisite: Successful completion of Biology

Marine Biology is a quarter-long, introductory course offered to seniors to gain a greater understanding of ocean science. This course will provide students an opportunity to explore an environment that accounts for 80% of the biodiversity on the planet. Through an integrated study of chemistry, biogeography, biology, and ecology, students will learn to appreciate and understand the diverse and intricate science of the oceans and their inhabitants. Students will be expected to develop connections between the sciences as well as develop critical thinking skills and appropriate academic language. Genetics is a quarter-long, introductory course offered to seniors. This course will provide students with a review of basic genetic principles from Mendelian Genetics to the impact on human health and society. Students will gain a greater understanding of the structure and function of DNA and its role in heredity. Students will learn to think critically concerning science’s impact on our society through connections to current events in the world of genetics.

AVIATION I1 Credit

The first half of this course provides the foundation for advanced exploration in flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will experience problem-solving practices and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will gain a historical perspective, from the earliest flying machines to various modern aircraft.

The second half of this core aerospace and aviation course provides the foundation for both pathways and gives students a clear understanding of career opportunities in aviation and aerospace and the critical issues affecting the industry. Students will also begin to explore the various sectors of aviation and the elements that make up the aerospace ecosystem. They will discover how advances in aviation created a need for regulation and learn about the promulgation of civil aviation oversight. Students will explore modern innovations and develop innovative ideas to address the aviation industry's real-world challenges. They will be exposed to various career options in aviation and aerospace and explore available opportunities.

AVIATION II1 Credit

In the Introduction to Flight portion of this course, students pursuing the Pilot and UAS tracks will look closely at the aircraft they may one day operate. Students will begin with an exploration of the types of aircraft in use today before learning how aircraft are made and how they fly. Students will understand how aircraft are categorized, be able to identify their parts, and learn about aircraft construction techniques and materials. They will gain an in-depth understanding of the forces of flight; lift, weight, thrust, and drag, and how to make key calculations. They will explore aircraft design, looking at stability, aircraft controls, and maneuvering flight. The course will focus on career skills related to these topics.

In the Aircraft Systems and Performance portion of this course, students in the UAS and Pilot tracks will take an in-depth look at the systems that make crewed and uncrewed aircraft work. Beginning with aircraft powerplants and fuel systems, students will learn about the options available and how they affect aircraft design and performance. They will explore other key aircraft systems, including electrical, pitot-static, and vacuum systems. Throughout the course, they will learn about the flight instruments associated with each system and how to identify and troubleshoot common problems. This unit also covers aircraft flight manuals and required aircraft documents. Finally, students will learn about the factors that affect aircraft performance and how to determine critical operating data for aircraft.

DRONE PATHWAY I: UAS OPERATIONS.....1 Credit

Prerequisite: Successful completion of Aviation II

This course is foundational for both crewed and uncrewed aviation. It will prepare students to take either Federal Aviation Administration tests: the Private Pilot Knowledge Test or the Part 107 Remote Pilot Knowledge Test. Topics include preflight procedures, airspace, radio communications, aviation terminology, regulations, airport operations, aviation safety, weather, cockpit management, and emergency procedures. The UAS Operations portion of the course will cover many topics surrounding UAS missions, from mission planning to UAV performance to crew resource management. Students may take the Federal Aviation Administration's Part 107 Remote Pilot Knowledge Test upon completion of this course.

DRONE PATHWAY II: THE WORLD OF UAS.....1 Credit

Prerequisite: Successful completion Drone Pathway I: UAS Operations

After preparing for the Part 107 Remote Pilot Test the previous year, students can earn a FAA certification and CTE stackable credential to work as commercial drone pilots. Students will use that certification—and the knowledge they acquired pursuing it—in real-world scenarios that illustrate how drones are used across various industries today. Students will learn how drone operations can be used to build or enhance a business and the entrepreneurial skills necessary to get a start-up off the ground. They will review drone rules within communities, enabling them to make recommendations to elected officials on optimizing UAS operations in their communities. Students will learn about and conduct different types of research in preparation for their capstone project. The capstone is the culmination of the student learning experience. The students will work as individuals or in small groups to study and report on a UAS topic of their choosing. The goal of this capstone course is to allow students to demonstrate an understanding of a contemporary topic in the drone industry.

SOCIAL STUDIES

AMERICAN STUDIES I1 Credit

This course serves as a foundation to the Social Studies program. Beginning with the age of exploration, students will be expected to reflect a suitable degree of understanding of the early settlement of North America by Europeans; the development of the thirteen colonies; the era of the American Revolution; the political, social and cultural development in early 19th century America and the Civil War. A variety of media will be used and the development of reading, writing and interpretive skills will be emphasized. Special attention will be given to the study of the Constitution of the United States.

AMERICAN STUDIES II 1 Credit

American Studies II is a study of the development of the United States from 1865 to the present. By studying our nation's past, the course will impart an understanding of our democratic ideals and develop an appreciation of the uniqueness of the political, economic, social and cultural-intellectual institutions as they evolved in the United States. The course will afford students an opportunity to prepare themselves for active citizen participation in our nation's democratic processes.

CIHS HUMAN GEOGRAPHY 1 Credit/ 3 RMU Credits

This course is to be taken during a student's eleventh grade year. This class will explore the meaning of culture, different cultures around the world (both in historical and present times), and the effects of different cultures within themselves and with other cultures. Areas of study include Asia with a focus on China, Africa, Latin America and The Middle East. Geography, history, government, economics, and religions will be examined for each area. A variety of media will be used and the development of reading, writing, and interpretive skills will be emphasized.

CIHS GOVERNMENT1 Credit/ 3 RMU Credits

This class will include the basics of government, formation of government, branches of government, the Constitution, Articles, and Amendments of the Constitution. Government will include the ideas of Federalism, the different types of government throughout the world, conflict in the government, and how the government is able to adjust to current times. This course will also include an in-depth study of the election process concentrating on the different types of elections and political parties.

CIHS AP EUROPEAN HISTORY1 Credit/ 3 RMU Credits

Prerequisite: Successful completion of American Studies II

Prerequisite: Advanced/Proficient achievement on the Keystone Literature Exam

This course is offered every other year.

The course consists of an ambitious survey of European History from the Fourteenth Century to the present. Due to the volume of material to be covered, student success requires disciplined reading habits and excellent study skills. In addition to the standard methods of evaluation, such as exams, identifications, and essays, students are required to complete two book evaluations and a term paper. Class time will be divided between lecture, discussion, formal debates, oral presentations, and examinations. All students will be encouraged to take the Advanced Placement Exam.

CIHS AP US HISTORY 1 Credit/ 6 Carlow Credits

Prerequisite: Successful completion of American Studies II

Prerequisite: Advanced/Proficient achievement on the Keystone Literature Exam

This course is offered every other year.

AP US History is an accelerated course with a format similar to those offered to college freshmen, consisting of a survey of the history of the United States from the time of the discovery of the western hemisphere to the present. The major forces, events, and personalities that affected the evolution of our nation's unique political, economic, social, and cultural character are examined. In depth supplemental readings and lectures provide students with opportunities to enhance their knowledge and refine their critical thinking skills of analysis, synthesis, and evaluation. All students will be encouraged to take the Advanced Placement Exam.

LAW AND JUSTICE..... 1 Credit

Law and Justice is an elective course that provides students with a broad overview of the criminal and juvenile justice systems. Students learn about historical developments and current practices in criminal law, corrections, and the courts. This course helps students understand why we live under the rule of law, and how laws are created, enforced, interpreted, and changed. The course enables students to examine diverse areas of law, including criminal, civil, constitutional, and international. It also explores civil rights issues and the role of advocacy, civics, and the media in our legal system.

INTRODUCTION TO ANTHROPOLOGY & ECONOMICS.....1 Credit

Anthropology is the study of humans. This class will introduce students to the biological, political, social, and cultural aspects of human development. There will also be a short section of Archeology, a branch of anthropology. Students are expected to dedicate time outside of class for reading and projects. Economics is the study of production, consumption, and transfer of material goods and services. Topics include micro-economics, macro-economics, classic capitalism, Keynesian Capitalism, comparative economics, and modern concerns such as fiscal policy and taxes. Students are expected to dedicate time outside of class for reading and projects and participation in class discussion is part of the course.

WORLD LANGUAGE

FRENCH I 1 Credit

The purpose of the beginning course in French is to learn the language as a means of communication. The students will be introduced to all five language-learning skills: reading, writing, listening, speaking, and culture. The emphasis will be on how to use these skills in everyday communication. To achieve this, the main language of instruction will be French and the students will be evaluated through both written and oral exams. Students should expect to devote at least 1 1/2 to 2 hours of out-of-class time per week.

FRENCH II 1 Credit

Prerequisite: Successful completion of French I

To bridge the gap between the elementary and intermediate levels, the introductory lessons are devoted to a review of structures previously studied. The procedures used in the elementary courses have been continued with additional techniques suitable to the more advanced stage. Attention is given to the development of grammar for acquiring greater facility in reading, writing, and speaking. There will be both oral and written grades throughout the year and the course will be taught primarily in French.

FRENCH III 1 Credit

Prerequisites: Successful completion of French II

French III is designed for students to increase their general knowledge of French. They will strengthen reading skills and will improve comprehension of spoken French. A segment of the course is also designed to present to the students a picture of the French, their humor, basic values, and civilization. The emphasis of this course will be on student output, i.e., using and applying what they have learned previously, in both orally and in writing. This course will be conducted in the target language.

SPANISH I 1 Credit

The Spanish I course is intended to be a student's first contact with the language. Students will learn vocabulary and grammatical concepts with the aim of communication through speaking, listening, reading, and writing across various situations with multiple purposes. Students will investigate cultural phenomena such as holidays, traditions, cuisine, art, music, and literature while connecting and comparing their learning with their own culture and language. Students will be encouraged to incorporate the Spanish language into their daily lives.

SPANISH II 1 Credit

Prerequisite: Successful completion of Spanish I

Spanish II builds upon the learning and techniques of introductory Spanish. Emphasis is placed on building a useful vocabulary, learning more difficult grammatical constructions, and increasing facility in the core communicative skills of listening, speaking, reading, and writing. Students will continue to develop their understanding of the different cultures and perspectives in the Spanish-speaking world through project based learning. Students will consider how Spanish can help them reach their goals when applied in the broader community.

SPANISH III 1 Credit

Prerequisites: Successful completion of Spanish II

Spanish III is designed to strengthen the students’ communicative skills of speaking, listening, writing, and reading. Students will continue to build their vocabulary and grammatical knowledge. Current events and podcasts will provide opportunities for students to hone their reading and listening comprehension skills. Students will be expected to express their original opinions and thoughts in Spanish in speech and writing. Activities include studying Hispanic literature, history, geography, traditions, customs, cuisine, music, and art to promote an appreciation of the Spanish- speaking countries.

SPANISH IV 1 Credit

Prerequisite: Successful completion of Spanish III

The Spanish IV course is designed to cover advanced linguistic concepts. Activities will center around communicative skills needed for dialogues, impromptu conversations, questions and answers, and individual speeches, as well as frequent conversations on a one-to-one basis. Included in this course will be the study of the subjunctive mood. Also included is a survey of the civilization of the Hispanic world through its history, geography, traditions, customs, cuisine, music, literature, and art further promoting an appreciation of the Spanish- speaking countries and their cultures. Each year students read one or more novels in Spanish.

HEALTH AND PHYSICAL EDUCATION

HEALTH0.50 Credit

Health is the state of total physical, mental, and social well-being, not just freedom from sickness of ailments. Health education provides health information in such a way that it influences people to take positive action about their health. Health education is a high school graduation requirement. The content is covered by lectures, in-class worksheets, Current Health magazines, movies, homework, group projects, and library research.

PHYSICAL EDUCATION 9, 10, 11 & 12 1 Credit

Physical Education classes are designed to develop sound conditioning and fitness and to enhance skills in activities ranging from individual athletic pursuits to team sports. Students are expected to dress and participate actively. Failure to meet this requirement will result in removal from class without credit. Mandatory dress guidelines are: white or gray T-shirt, red shorts or sweatpants, or Northgate team apparel, appropriate athletic shoes, and socks. After warm-up drills, students participate in a variety of individual or team activities, *All students in 9th grade will be scheduled for physical education, but students in grades 10, 11, and 12 can take additional credits as elective credits.*

PERSONAL FITNESS 9, 10, 11 & 12 1 Credit

This course aims to provide students with the necessary skills to help prevent disease, and live a healthier lifestyle. In this course students will explore various forms of exercise and physical fitness, helping them meet the recommended amount of physical activity. By focusing on the five health-related fitness components, students will be set up to carry their skills into their lives, long after graduating high school.

ADVANCED PERSONAL FITNESS 9, 10, 11 & 12 1 Credit
 The purpose of this course is to aid students in their development of physical literacy, while simultaneously creating lifelong physical activity habits. Through various instructional methods students and student-athletes will work together to achieve their fitness goals. By working directly with the instructor, each student will work throughout the semester to construct a developmentally appropriate and individualized fitness plan to meet their goals and needs.

BUSINESS AND TECHNOLOGY EDUCATION

CIHS COMPUTER SCIENCE PRINCIPLES 1 Credit/3 RMU Credits
(Grades 10, 11, and 12 only)

Prerequisite: Successful completion of Algebra I

This is a general computer literacy course engaging students in multiple introductory coding and production applications. Students learn computer fundamentals, applications, online research skills, and the impact of computing and the Internet on society. Students develop skills with common applications to use a computer as a tool, make informed decisions concerning computer generated information, and obtain basic information systems concepts and terminology. The course is aligned with the College Board’s AP CS Principles course syllabus.

CIHS AP COMPUTER SCIENCE A 1 Credit/3 RMU Credits
(Grades 10, 11, and 12 only)

Prerequisite: Successful completion of Algebra I

AP Computer Science A (CSA) is an introductory college-level computer science course. It introduces students to software engineering and object-oriented design while learning the Java programming language. The AP CSA curriculum is recommended for any high school student who wishes to continue their computer science education after completing an introductory course, such as Computer Science Principles (CS Principles) or Computer Science Discoveries (CS Discoveries).

BUSINESS COMMUNICATIONS AND PERSONAL FINANCE 1 Credit

This course examines communication knowledge and skills with an emphasis on identification and application of the skills needed to successfully communicate on a personal level, in the workplace, and among different cultures. Throughout the course, students will cover a variety of topics that expose them to college and career readiness standards, in addition to the elements of financial literacy. *This course is a requirement for all 9th grade students.*

HS ENTREPRENEURSHIP1 Credit

Students will explore the world of business through idea generation, marketing, management, risk assessment, legal structure, financial projections, customer service, business etiquette, economic principles, marketing, problem solving, and leadership skills.

MARKETING1 Credit

This course will explore the dynamic world of marketing in a fun setting. Students will gain

knowledge in the fundamentals of creating, promoting, and delivering products/services/ideas to meet customer needs. Topics include market research, branding, advertising, social media, and consumer behavior. Through interactive projects and real-world examples, students will develop the skills to craft effective marketing strategies and understand the role of marketing in business success.

TECHNOLOGY, ENGINEERING, AND ART

MAKING COOL STUFF (MCS) 0.50 Credit

All 9th grader students will be enrolled in MCS and will rotate with the required Health class. Students will engage in project-based making, rooted in their passions across the three curriculums of Technology Education, Art, and Design/Engineering. This course will provide students with a thorough understanding of the Technology, Engineering, and Art courses available in grades 10-12.

STUDIO ARTS I, II, and III..... 1 Credit

Skills learned in MCS are essential for success in Studio Arts. Students will explore advanced art techniques in two and three-dimensional art making. Students are encouraged to explore conceptually as well as technically through assignments. Mediums used include clay, plaster, wire, metal, wood, paper mache, fabric, watercolor, acrylic, oils, charcoal, pastels, graphite, pen and ink, printmaking, photography, computer art, and collage. Students will learn to critique their own work and the work of others in an objective manner using terms related to the elements of art and principles of design. The use of a sketchbook is required from all students to complete homework and research assignments given at the beginning of every lesson to aid in their personal and artistic development.

GRAPHIC DESIGN 1 Credit

Prerequisite: Successful completion of MCS

Graphic Design teaches art and technology and introduces students to a variety of digital media career opportunities. In this class students will be exposed to the skill of visual communication to represent ideas or concepts. Students will also explore various methods used to create and combine words, symbols, and images to create a visual representation of ideas and messages. Students will be given the opportunity to explore the design process and; using critical thinking skills, find creative visual solutions while designing many of their own projects.

MATERIALS AND FABRICATION I, II, and III 1 Credit

Skills learned in MCS are essential for success and is for students who wish to develop a better understanding of tools and techniques used in a materials processing shop. The students must utilize the design process to select the appropriate processing techniques needed to complete various student designed, instructor approved projects. Students must be capable of operating all power tools properly and safely with the proper instruction. Safety will be heavily emphasized.

PATHWAY 2 BUILD PRE-APPRENTICESHIP..... 1 Credit

NCCER curriculum introduces students to construction safety, hand tools, power tools, and skills necessary for students to gain full-time employment in the construction sector following graduation.

Student benefits from the NCCER initiative include:

- Earn completion credit towards enrollment into ABC Western PA apprenticeship programs;
- Access to contractors in the ABC Network for field trips and site visits;
- Graduate job placement with ABC network of contractors;
- Access to low cost apprenticeship tuition;
- Portable, nationally recognized NCCER credentials at level completions.

INNOVATIVE DESIGN I, II, and III 1 Credit

Prerequisite: Successful completion of MCS

Students will develop solutions to real world problems requiring a wide range of skills and creative thinking using design thinking curriculum in cooperation with local businesses and organizations. This course will provide an interdisciplinary approach to integrating disciplines within real world applications. Students will participate in problem-based and project-based learning activities, inquiry learning tasks, and technology to share and display information.

ROBOTICS1 Credit

Prerequisite: Successful completion of Innovative Design I?

This course prepares students to understand and apply technological concepts and processes by introducing the steps of the engineering design process, and working through those steps as they complete multiple design challenges. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. As students generate solutions, a heavy emphasis is placed on understanding and use of the OnShape CAD program for modeling solutions. Students will design and build functioning robots, use motors and sensors to control them, and program them using the VEX V5 robotic building system. Students apply basic principles of algebra and geometry while learning about energy, force, speed, power, simple machines, complex mechanisms, coordinate systems, and measuring. Through a series of hands-on experiences, students will become familiar with sketching, lettering, scale drawing, print reading, visualization, and dimensioning used by engineers and designers. Students may also have the opportunity to construct a functioning combat robot to compete in the BOTS IQ combat robotics program.

IMT PRE-APPRENTICESHIP..... 1 Credit

Online Course

The Industrial Manufacturing Technician Apprenticeship helps entry-level workers in manufacturing quickly enhance their skills and advance with their current employer. Due to changing manufacturing technologies, entry-level workers require higher skills than before and employers are struggling to recruit and retain these type of workers. The IMT program is a state registered apprenticeship to help meet these employer needs. This is part I of a two part pre-apprenticeship.

ADVANCED IMT PRE-APPRENTICESHIP..... 1 Credit

Online Course

The Industrial Manufacturing Technician Apprenticeship helps entry-level workers in manufacturing quickly enhance their skills and advance with their current employer. Due to changing manufacturing technologies, entry-level workers require higher skills than before and employers are struggling to recruit and retain these type of workers. The IMT program is a state registered apprenticeship to help meet these employer needs. This is part II of a two part pre-apprenticeship.

PERFORMING ARTS

MARCHING BAND/CONCERT BAND S1..... 1 Credit

Prerequisite: Successful completion of Middle School Band.

This course has a dual focus on Marching Band and Concert Band. During the 1st 9 weeks portions of the class are dedicated to practicing Marching Band related music and content. Participation in all band and band-related events is mandatory. Events include all varsity football games, band festivals, parades, and community events scheduled during the first semester. Marching Band has one evening practice per week and a football game each Friday. Saturday events will be announced prior to the start of the season. *Attendance at summer band rehearsals and band camp are required in order to participate in the marching band.*

Concert band elements are included for the entire semester and during the 2nd 9 weeks the focus will solely be on Concert Band. Concert Band will focus on concert band repertoire and performances. Participation at all band and band-related events is mandatory except when prior administrative excusal is granted for extenuating circumstances. Additional rehearsals may be required as needed. Progress is monitored through playing tests and performances.

Related activities: Members of the Concert Band are eligible to participate in smaller ensembles, such as jazz band. These groups rehearse after school. Additionally, students may be selected to represent Northgate at various district and regional band events and festivals.

CONCERT BAND S2 1 Credit

This course is a continuation of Concert Band S1. Participation at all band and band-related events is mandatory except when prior administrative excusal is granted for extenuating circumstances. Additional rehearsals may be required as needed. Progress is monitored through playing tests and performances.

CONCERT CHOIR 1 Credit

Concert Choir is a group of mixed voices coming together in song. Students experience an array of musical genres and become well-rounded musicians in this course. Our Choir presents various evening performances for Fall, Winter, and Spring. Attendance is mandatory for all tech rehearsals and performances. As a choir member students have the opportunity to showcase artistic expression while developing self-confidence and esteem. We give back to our school and surrounding communities in a positive way spreading our love of music. Students who are dedicated to singing, music, and the arts are encouraged to enroll in this course.

INTERNSHIPS

INTERNSHIPS 1-4 Credits

An internship is a highly-structured, sustained career preparation activity in which students are placed at a workplace for a defined period of time to participate in and observe work firsthand within a given industry. With the support of a counselor students will be consulted to determine placement, mentor and learning objectives will be specified, as well as reviewing how student performance is assessed. Length of the internship will vary based on credit weight, a longer time period in the workplace deepens the learning experience for the student. This deepened experience enhances the transference of employability skills and increases the acquisition of technical skills through hands-on experiences. The internship will be awarded 1 credit for per 120 clock hours. Internships receive a pass/fail grade.

FIRE SERVICE TRAINING @ ALLEGHENY COUNTY FIRE ACADEMY DEFA1 OFFERED IN GRADES 10-12 1-3 Credits

This elective program is offered in partnership with the Allegheny County Fire Training Academy in an effort to provide students interested in serving their communities within a volunteer fire company opportunities to learn entry level fire training, CPR, and first aid. While membership in a local fire company is recommended, it is not required.

One to two days per month, students will be transported to the Allegheny County Fire Academy (North Park) and participate in course work, both classroom based and hands-on, to learn the knowledge and skills necessary to serve as an entry-level volunteer fire-fighter. Students are also eligible for industry certifications and potential scholarship opportunities including the FireVEST program through CCAC. Students enrolled in this program will maintain a typical schedule and be excused from Northgate classes on the days of the program (12-14 sessions each year). Students may enroll in multiple years and will advance through the training curriculum each year.

Work Study Program

Students may pursue work hours during a portion of the school day. This decision must be a healthy and active decision for a motivated and driven student seeking this collaborative experience. Work study receives a pass/fail grade.

- 120 hours of work time equates to 1 credit; students may gain up to 2 credits during 11th and 12th grades (4 credits total). Credits may only be earned during the school year.
- Hours must be logged and approved by a school administrator and/or counselor.
- Students must provide copies of pay stubs or timesheets signed by their employer for verification of hours. Students are responsible for keeping track of their total hours.
- If students lose their employment, they have four weeks to secure a new job, or they will be unenrolled from the Work Study Program and assigned online coursework.

1 or 2 per year Limit 1 per semester	Elective Credit	Grades 11 / 12	Approval Process - Parent Signature, Counselor Signature, and Principal Signature
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HIGH SCHOOL ADVISORY PROGRAM

This advisory period is designed to equip high school students with the tools needed for academic achievement and personal development. The course focuses on four key areas: Social Emotional Learning (SEL), executive functioning, post-secondary planning, and preparation for required state exams. Through engaging activities, reflective discussions, and focused practice, students will:

- Enhance self-awareness, manage stress effectively, and develop meaningful interpersonal connections through SEL activities.
- Strengthen executive functioning skills such as advanced organization, time management, goal-setting, and self-advocacy to meet high school and post-secondary demands.
- Prepare thoroughly for required state exams by mastering test-taking strategies, solidifying academic knowledge, and addressing areas for improvement.

Participation in this course is a vital aspect of each student's high school experience, and active involvement is expected. Students will receive regular feedback and individualized support as they strive to develop these essential skills.

This course will be graded on a pass/fail basis, which will be reflected on report cards and transcripts. It will also be used when determining honor roll and eligibility. Success in this advisory period requires consistent participation, sustained effort, and a commitment to personal and academic growth.

A.W. BEATTIE CAREER CENTER

A.M. Morning Session 3 Credits

This program is for students in grades 10, 11, and 12.

General Information

A.W. Beattie Career Center offers students an opportunity to prepare for their chosen career field through advanced career preparation during their 10th, 11th, and 12th grade years. Students attending A.W. Beattie Career Center are enrolled in the morning session and spend the remainder of the day at Northgate. Three credits are awarded each year to students successfully completing career coursework. A.W. Beattie Career Center credits and grades are included in the QPA and class rank.

All of the A.W. Beattie Career Center Programs offer advanced college credit upon successful completion. Potential college credits range from three to twenty-two 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 free credits, students must submit the proper paperwork to the college, as outlined below. This paperwork requires CTE administrative signatures for submittal.

IDENTIFY COLLEGES OFFERING FREE CREDITS FOR YOUR CTE PROGRAM OF STUDY.

To determine the free credits offered for Pennsylvania Career and Technical Education 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 of the colleges offering free credits for your particular CTE program. Additionally, A. W. Beattie Career Center maintains many college credits articulation agreements with two and four year post secondary institutions, please visit our website www.beattietech.com for additional information.

Students who attend A.W. Beattie's programs require uniforms and equipment. The student and parents assume this cost. Students should obtain accurate cost information before enrolling in 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 9th or 10th grade and will be carefully reviewed. Further information concerning the A.W. Beattie Career Center's program is available in the School Counseling Office.

A.W. Beattie Career Center Programs

- Advertising Design
- Automotive Collision Technology
- Automotive Technology
- Carpentry/Building Construction
- Computer System Technology, Network Engineering Technology and Cyber Security
- Cosmetology
- Culinary Arts
- Dental Careers
- Early Childhood Education
- Emergency Response Technology
- Health and Nursing Sciences
- Heating, Ventilating and Air-Conditioning Technology
- Introduction to Pharmacy (limited to 12th grade only)
- Pastry Arts
- Robotics Engineering Technology
- Sports Medicine/Rehab Therapy
- Surgical Sciences
- Veterinary Sciences Technology (VET-TECH)

Certifications: Through strategic planning and partnerships with local employers, A.W. Beattie Career Center offers several nationally recognized validated skills certifications (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. Learning Center services are open to all students. The Center is designed to facilitate the need of students to help them reach their full potential. Facilitators provide support services through tutoring, study guides, test assistance, and curriculum modification. Facilitators and Instruction Assistants offer support in the classroom and labs.

Contact A.W. Beattie Career Center for more information:

A.W. Beattie Career Center | 9600 Babcock Boulevard | Allison Park, PA 15101

Phone: 412-847-1912 | Fax: 412-366-9600

www.beattietech.com

A.W. Beattie Career Center Counselors:

Sara Goodyear: sara.goodyear@beattietech.com (last names A-L)

Kim Zylinski: kim.zylinski@beattietech.com (last names M-Z)

A.W. BEATTIE CAREER CENTER DESCRIPTIONS

Advertising Design: The Advertising Design program focuses on a wide variety of professional art-related fields including: Digital Graphic, Design, Multimedia, Digital Photography, and Web Design. Students will use the latest in professional graphic design software to hone their creativity.

Automotive Collision Technology: Students are trained in all aspects of the industry including MIG welding, computerized paint mixing, and automotive spraying techniques. Students have the opportunity to earn certification in I-CAR.

Automotive Technology: Instruction covers a wide range of skills including engine repair, computer diagnostics, and maintenance. Students will have the opportunity to earn a Pennsylvania State inspection and Emissions Certification.

Carpentry/Building Construction: Students will receive classroom and hands-on training in carpentry, masonry, plumbing, residential wiring, and blueprint reading, while also having the opportunity to build a modular home.

Computer Systems Technology, Network Engineering Technology and Cyber Security: Students will learn the basics of networking as well as building, maintaining, and troubleshooting computers. They will set up and maintain internet services.

Cosmetology: Students will study the care of hair, nails, and skin while learning the proper use of cosmetology tools and equipment. Students will practice their skills in the professional salon that is open to the public. Upon completion of the required hours, students will be eligible to test for their Pennsylvania State Cosmetologist License.

Culinary Arts: In this program, students learn all aspects of the restaurant business from meal planning, food preparation, baking and carving, to dining room management and banquet serving. In this program, students practice their craft in a commercially equipped kitchen as well as their customer service skills in the restaurant.

Dental Careers: This program provides students with the necessary skills for employment in dental assisting and lab technician, among other opportunities within the dental industry. Students learn the latest techniques to prepare for their PA Dental Radiology Certification.

Early Childhood Education: Students learn about the physical, social, emotional, and intellectual aspects of early childhood development. In addition to a variety of classroom activities, qualified students apply their teaching skills in Beattie's onsite child care center.

Emergency Response Technology: Students study police science, fire science, rescue operations, hazardous materials, and emergency medical services. They will be challenged with exciting hands-on training in a fully equipped on-site lab. Also, students will have the opportunity to earn their Pennsylvania Department of Health EMT Certification.

Health and Nursing Sciences: The core curriculum will prepare students for entry level positions such as medical assisting and nurse assisting. Students will gain valuable hands-on clinical experience in hospitals and nursing homes where they will practice and perfect their skills.

Heating, Ventilating, and Air Conditioning: HVAC trains students with the necessary skills to become qualified technicians and mechanics. Students learn heating installation and service, air-conditioning, plumbing, electrical wiring, refrigeration and sheet metal fabrication.

Introduction to Pharmacy: Students will learn compounding formulas and ratios, laws and regulations, and practice with industry equipment. The interactive training prepares students to test for the Pharmacy Technician certification. The program is limited to 12th grade students.

Pastry Arts: Pastry Arts provides students with an opportunity to learn all functions of a commercial bakery while perfecting their creative pastry skills. Students receive training on everything from baked goods preparation to merchandising and dining room service.

Robotics Engineering Technology: Students move through a series of introductory activities into advanced design using curriculum developed through the National Robotics Engineering Center. Due to the broad application of robotics, numerous employment opportunities exist locally and nationally.

Sports Medicine/Rehab Therapy: This program is designed for students looking toward careers in the fields of physical therapy, occupational therapy, physical rehabilitation, exercise physiology, and sports medicine. The program provides a knowledge base that a student may build upon with a post-secondary degree or advanced certification.

Surgical Sciences: This program will provide the opportunity for students to explore a variety of duties related to the procedures, tools, and equipment required within a hospital operating room setting. Students will learn skills needed for infection control and central sterile processing of equipment. Students will gain a solid foundation for their college and career pathway.

Veterinary Sciences Technology: Students enrolled in the Veterinary Assistant program will learn a wide variety of care and management techniques including examination room procedures, surgical assisting, pet first aid, and small animal nursing. They will gain a solid foundation of skills for an entry level position or to begin their pursuit of a post-secondary degree.

- Course offerings and information are subject to change

GRADUATION PORTFOLIO REQUIREMENTS

9TH GRADE - WHO AM I?

SMART FUTURES (in Advisory)

- Students complete the following lessons in Smart Futures: New Thinking about Career Success, My Personality Type, Job Application, Preparation Career, Abilities and Aptitudes.
- Due in Smart Futures by May 31st

Business Communication & Personal Finance

- All students will take their required Business Communication & Personal Finance course in 9th grade as a Freshman Seminar experience. Artifacts created as part of this course should be scanned and uploaded into Smart Futures by May 31st.

10TH GRADE - EXPLORATION

SMART FUTURES (in Advisory)

- Students complete the following lessons in Smart Futures: Personal Interests, Career Clusters and Pathways, Experiencing Careers While Still in School, Selecting Your Career Goals.
- Due in Smart Futures by May 31st

PSAT, ASVAB, & SATs (Guidance)

- Focus on all sophomores taking PSAT discuss information applicable to the SAT Exams.
- Registration/testing dates fall of the sophomore year.

COMMUNITY SERVICE (approved by 10th grade advisor)

- 10 hours of a community service project. Plan must be approved by the 10th grade advisor by the date below, but the student has until the start of their second semester in 12th grade to complete it.
- Verification signature page due May 31st.

*At the end of the sophomore year, all materials needed for the 11th grade portion of the project will be **distributed and discussed in advisory** for any students wanting to use summer days to complete tasks voluntarily.*

11th GRADE - COLLEGE & CAREER PROJECT PREPARATION

SMART FUTURES (in Advisory)

- Students complete the following lessons in Smart Futures: My School and College Survey, Job Interviews, Active Listening, The Entrepreneur Within, Personal Budget
- Due in Smart Futures May 31st

COLLEGE APPLICATIONS / ESSAYS (in advisory 11)

- Juniors will practice and get guidance on how to fill out a college application and complete the essay using the Common App site.

JOB SHADOW (approved by 11th grade advisor)

- 4 hour live shadow
- Questions/Answers due uploaded in Smart Futures by May 31st.
- Signed Contact/Verification signature pages due uploaded in Smart Futures by May 31st.

ASVAB & SAT TESTING (School Counselor)

- Focus on students who have not yet passed the Keystones taking ASVAB and discuss information applicable to the SAT exams.
- Registration/testing dates

12TH GRADE SLIDES PROJECT

JOB SKILLS DOCUMENTS (in Advisory 12)

- The following documents should be updated
 - Cover letter
 - Resume
- Students should also practice completing
 - Applications
 - Thank you letters

GOOGLE SLIDES (in Advisory 12)

- Must be Google Slides (not PowerPoint)
- Attention getter must be **first slide**
- Introduction of self and career choice must be **second slide**
- **Third slide** through remaining customized to individual needs
- Due at the time of the presentation.

PRESENTATION (during evening conferences)

- 15-20 minutes, not including the question and answer session at the conclusion
- Must receive 60% or higher or must redo and re-present (all elements mandatory for all students, with the exception of any IEP accommodations communicated to all involved)
- Due at the time of the presentation

DEMONSTRATION (during presentation)

- Live or pre-recorded demonstration
- Due at the time of the presentation.

GUIDANCE DEPARTMENT RESPONSIBILITIES

ACT 158

- Monitoring requirements for ACT 158

SMART FUTURES ACT 339

- Monitoring completion of portfolio on Smart Futures

CAREER PATH PLANNING DOCUMENT

- Yearly, during scheduling meeting

STANDARDIZED TESTING INFORMATION & PROCEDURES

- PSAT, ASVAB, & SAT

JOB FAIRS

- Communicate directly with students about job fair dates and all details.

COLLEGE FAIRS

- Communicate directly with students about college fair dates and all details.

TRADE SCHOOLS INFO

- Communicate directly with students about trade school options and all details.

SCHOLARSHIP RESEARCH

- Communicate directly with students about scholarship opportunities and resources.

FINANCIAL AID INFO

- Communicate directly with students about financial aid options and procedures.

You attend a high school where you have the ability to chart & plan for your learning experience. What does that mean? What goals do you hope to achieve by the time you graduate? Where do you see yourself starting after you graduate from high school?

These are questions we want you to consider regularly as you go through your years at Northgate. Listed below are school indicators that help define successful learners who are prepared to enter college or a post-secondary program, a career, or a combination of all three!

We want you to check each item that you've completed. Some are not intended to be completed until your senior year. It is not expected that every box will be checked; rather we want learners to use this as you set goals and assess your progress.

NORTHGATE GRADUATE
PROFILE

KEYS TO SUCCESS



NORTHGATE
SCHOOL DISTRICT

Name: _____ Mentor: _____ Grade: _____

Career Pathway/Interest: _____

Post-Graduation Plan: College (2 or 4 year)

Essential Actions	Recommended Actions
<ul style="list-style-type: none"> <input type="checkbox"/> Complete a mock interview <input type="checkbox"/> Complete a job shadow <input type="checkbox"/> Complete grad project <input type="checkbox"/> Create a resume <input type="checkbox"/> Attend college visits <input type="checkbox"/> Attend counseling office college rep visits <input type="checkbox"/> Complete scholarship applications <input type="checkbox"/> Member of a club, sport, or organization at Northgate <input type="checkbox"/> Member of a community organization <input type="checkbox"/> Community service project <input type="checkbox"/> Complete at least Algebra II <input type="checkbox"/> Complete two consecutive world language courses 	<ul style="list-style-type: none"> <input type="checkbox"/> Complete an Internship <input type="checkbox"/> Take at least 5 courses in career pathway <input type="checkbox"/> Take at least 2 lab sciences <input type="checkbox"/> Take Dual Enrollment courses <input type="checkbox"/> Hold a student leadership position <input type="checkbox"/> Attend career speaker activity or field trip <input type="checkbox"/> Attend Planning events hosted by Northgate or other institutions about financial aid, college & career fairs, etc. <input type="checkbox"/> Take the PSAT <input type="checkbox"/> Take the SAT or ACT <input type="checkbox"/> Take at least one AP course

Northgate Graduate Profile

KEYS TO SUCCESS



**NORTHGATE
SCHOOL DISTRICT**

You attend a high school where you have the ability to chart & plan for your learning experience. What does that mean? What goals do you hope to achieve by the time you graduate? Where do you see yourself starting after you graduate from high school?

These are questions we want you to consider regularly as you go through your years at Northgate. Listed below are school indicators that help define successful learners who are prepared to enter college or a post-secondary program, a career, or a combination of all three!

We want you to check each item that you've completed. Some are not intended to be completed until your senior year. It is not expected that every box will be checked; rather we want learners to use this as you set goals and assess your progress.

Name: _____ Mentor: _____ Grade: _____

Career Pathway/Interest: _____

Post-Graduation Plan: Military

Essential Actions	Recommended Actions
<ul style="list-style-type: none"> <input type="checkbox"/> Complete a mock interview <input type="checkbox"/> Complete a job shadow <input type="checkbox"/> Complete grad project <input type="checkbox"/> Create a resume <input type="checkbox"/> Take the ASVAB <input type="checkbox"/> Member of a club, sport, or organization at Northgate <input type="checkbox"/> Member of a community organization <input type="checkbox"/> Community service project <input type="checkbox"/> Complete at least Algebra II 	<ul style="list-style-type: none"> <input type="checkbox"/> Complete an Internship <input type="checkbox"/> Take at least 5 courses in career pathway <input type="checkbox"/> Hold a student leadership position <input type="checkbox"/> Attend career speaker activity or field trip <input type="checkbox"/> Complete two world language courses <input type="checkbox"/> Take at least one AP course <input type="checkbox"/> Take at least one AP exam <input type="checkbox"/> Take Dual Enrollment course <input type="checkbox"/> Take the SAT or ACT

You attend a high school where you have the ability to chart & plan for your learning experience. What does that mean? What goals do you hope to achieve by the time you graduate? Where do you see yourself starting after you graduate from high school?

These are questions we want you to consider regularly as you go through your years at Northgate. Listed below are school indicators that help define successful learners who are prepared to enter college or a post-secondary program, a career, or a combination of all three!

We want you to check each item that you've completed. Some are not intended to be completed until your senior year. It is not expected that every box will be checked; rather we want learners to use this as you set goals and assess your progress.

Northgate Graduate Profile

KEYS TO SUCCESS



Name: _____ Mentor: _____ Grade: _____

Career Pathway/Interest: _____

Post-Graduation Plan: Work/Certification Program

Essential Actions	Recommended Actions
<ul style="list-style-type: none"> <input type="checkbox"/> Complete a mock interview <input type="checkbox"/> Complete a job shadow <input type="checkbox"/> Complete grad project <input type="checkbox"/> Create a resume <input type="checkbox"/> Visit a furthering education center <input type="checkbox"/> Attend career speaker activity or field trip <input type="checkbox"/> Member of a club, sport, or organization at Northgate <input type="checkbox"/> Member of a community organization <input type="checkbox"/> Community service project <input type="checkbox"/> Take specific courses in field of interest (technology education, business, art) 	<ul style="list-style-type: none"> <input type="checkbox"/> Complete an Internship/pre-apprentice program <input type="checkbox"/> Take at least 5 courses in career pathway <input type="checkbox"/> Hold a student leadership position <input type="checkbox"/> Take ASVAB <input type="checkbox"/> Complete Algebra II <input type="checkbox"/> Complete two world language courses <input type="checkbox"/> Research scholarship opportunities specific to your field of interest <input type="checkbox"/> Pre-apprenticeship program <input type="checkbox"/> Hold a Part-time Job