

Middle/High School Program of Studies

and

NOLA Guide

2026 - 2027



**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 **2026-2027 Program of Studies and Northgate Online Academy (NOLA) 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 Program of Studies and Northgate Online Academy Guide is to provide our students and their families with a comprehensive listing of courses available to middle school and high school students. An overview of policies and procedures relevant to Northgate's graduation requirements is also included.

This document has been prepared to include the course schedule for students entering middle school, grades 7 and 8. The Program of Studies and NOLA Guide will also assist every student entering grades 9 through 12 in planning your comprehensive educational 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 14. We request 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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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 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 8th 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 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.

MATH 8

Math 8 curriculum is aligned to the PA Core Standards for Mathematics. The focus of the course is 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. Students successfully completing this course and achieving proficiency on the Algebra Keystone Exam, are 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 centers on building historical thinking skills to analyze topics in history, civics, and current events. Students will engage in thematic units with integrated reading, writing, and speaking activities about how to be a historian, the systems of government, the origins of our nation, foreign affairs, and global issues. Students will connect history 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, with a focus on world history. Critical thinking skills are encouraged and practiced through simulations, collaborative projects, and independent learning activities. The course curriculum emphasizes connections between geography, history, economics, psychology, and social skills.

MIDDLE SCHOOL ELECTIVE PATHWAYS

PERFORMING ARTS PATHWAY

Students choosing the Performing Arts Pathway are guaranteed Band, Chorus, or both courses five (5) days per week. Band and Chorus take place during one of the exploratory rotations. Students selecting the performing arts pathway will still be exposed to many of the exploratory rotations.

MIDDLE SCHOOL CHOIR

Middle School Chorus is a group of mixed voices coming together in song. Students experience a variety of musical genres and become well-rounded musicians. Proper vocal technique, performance skills, and knowledge of musical concepts are taught in this course. The National Standards of the Arts are followed. Our Chorus presents evening performances for Winter and Spring. Attendance is mandatory for rehearsals and performances.

MIDDLE SCHOOL BAND

Middle School Band is a hands-on ensemble course introducing students to instrumental performance, music reading, and collaborative rehearsal skills. Participation at all band and band-related events is mandatory. Additional rehearsals may be required. Progress is monitored through playing assessments and performances. Members of the Middle School Band are eligible to participate in ensembles, such as jazz band. These groups rehearse after school. Students may be chosen to represent Northgate at various district and regional band events and festivals.

Students who do not choose the Performing Arts Pathway will be enrolled in the Exploratory 1 Pathway. Each course is 9 weeks long.

Grade 7 (period 2)	Grade 7 (period 3)	Grade 8 (period 2)	Grade 8 (period 3)
Band and/or Chorus	Digital Skills and Research, Materials and Fabrication, Music, and STEM	Band and/or Chorus	Computer Science, Health, Physical Education, and Studio Arts
OR		OR	
Health, Physical Education, Strategies for Academic Success, and Studio Arts		Drone Soccer, Exploratory World Language, Manufacturing, and Robotics	

EXPLORATORY ONE PATHWAY

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. 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.

STRATEGIES for ACADEMIC SUCCESS 7

This course empowers 7th-grade students with essential tools to enhance their academic success and personal growth. Through interactive lessons and hands-on activities, students will develop executive functioning skills, including organization, time management, goal setting, and self-regulation. Emphasis is placed on effective study strategies such as note-taking, active reading, and test preparation techniques. Students will explore the importance of mindfulness and managing stress. Learners will be equipped with practical strategies to navigate the demands of middle school and beyond with confidence.

STUDIO ARTS 7

This 9-week course introduces students to the language of visual art and design. Students explore how artists and designers use the elements (line, shape, color, value, texture, form, space) and principles (balance, contrast, emphasis, rhythm, unity, pattern, proportion, movement) to communicate ideas. Through hands-on projects, students develop craftsmanship, creative problem-solving, and an appreciation for art as both process and product.

DRONE SOCCER 8

This course introduces students to the world of drone technology and sports through team-based activities. Students will learn the fundamentals of flying drones and apply skills to play an innovative and fast-paced game: Drone Soccer. Drone Soccer combines the thrill of competitive sports with cutting-edge technology. 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.

EXPLORATORY WORLD LANGUAGES 8

The 8th-grade World Language Exploratory course is designed to introduce students to the basics of learning a world 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.

MANUFACTURING 8

The 8th grade Manufacturing is a course that builds on the 7th-grade skills as students design and fabricate projects with materials. The class reinforces safety protocols and responsible behavior while advancing basic tool operation and measurement techniques. Students complete projects that introduce intermediate fabrication methods, layout planning, and problem-solving strategies. Instruction balances demonstrations, guided practice, and independent time to develop skills and confidence. This course prepares students for high school technology pathways by strengthening craftsmanship and technical reasoning.

ROBOTICS 8

Students explore robotics, engineering, and coding using the VEX IQ STEM Labs curriculum. Through hands-on projects, they design, build, and program robots while learning mechanics, sensors, and problem-solving. The course emphasizes teamwork, creativity, and applying STEM concepts to real-world challenges.

EXPLORATORY TWO PATHWAY

DIGITAL SKILLS and RESEARCH 7

This 9-week, project-based course teaches students essential digital literacy and research skills using Gmail, Google Drive, Docs, and Slides. Students learn professional email practices, file organization, collaborative editing, document formatting, basic research, and source evaluation. Assessment focuses on a final multimedia presentation, a written research summary, and demonstrated proficiency in digital collaboration and communication.

MATERIALS and FABRICATION 7

7th Grade Materials and Fabrication is a hands-on course where students design and build age-appropriate projects using wood, metal, and plastics. The class emphasizes safety, responsible behavior, and basic tool operation while introducing simple fabrication techniques and measurement skills. Students complete projects that reinforce problem-solving, creativity, and craftsmanship. Instruction combines demonstrations, guided practice, and supervised independent work to build confidence with materials and tools. The course prepares students for higher-level technology education by developing foundational skills and safety habits.

MUSIC 7

The 7th-grade General Music course is a high-energy, inclusive general music class that uses everyday buckets as percussion instruments to teach rhythms, musical elements, and ensemble skills. Students learn foundational percussion techniques, groove development, composition and collaborative performance. The course emphasizes listening, steady beat, dynamics, and the importance of how to read and count rhythms. By the end of the course, students will have a broader understanding of music through the fun perspective of bucket drumming.

STEM 7

Students explore the engineering design process through hands-on STEM projects. Using Tinkercad, they create and refine 3D designs and bring their ideas to life with 3D printing. The course also introduces basic construction skills, problem-solving, and teamwork, giving students a strong foundation in design, engineering, and innovation.

COMPUTER SCIENCE 8

Computer Science 8 is a 9-week course for students to learn the basics of the Python programming language. During this 9-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, titled "Exploring Programming," is specifically designed for middle school-aged students.

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.

STUDIO ARTS 8

This 9-week visual art course focuses on building technical drawing and painting skills, strengthening observational accuracy, and applying compositional strategies through mixed-media design. Students progress from contour line and grid-based portrait drawing to watercolor/acrylic landscape painting, culminating in a mixed-media composition demonstrating mastery of learned techniques.

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.
- 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

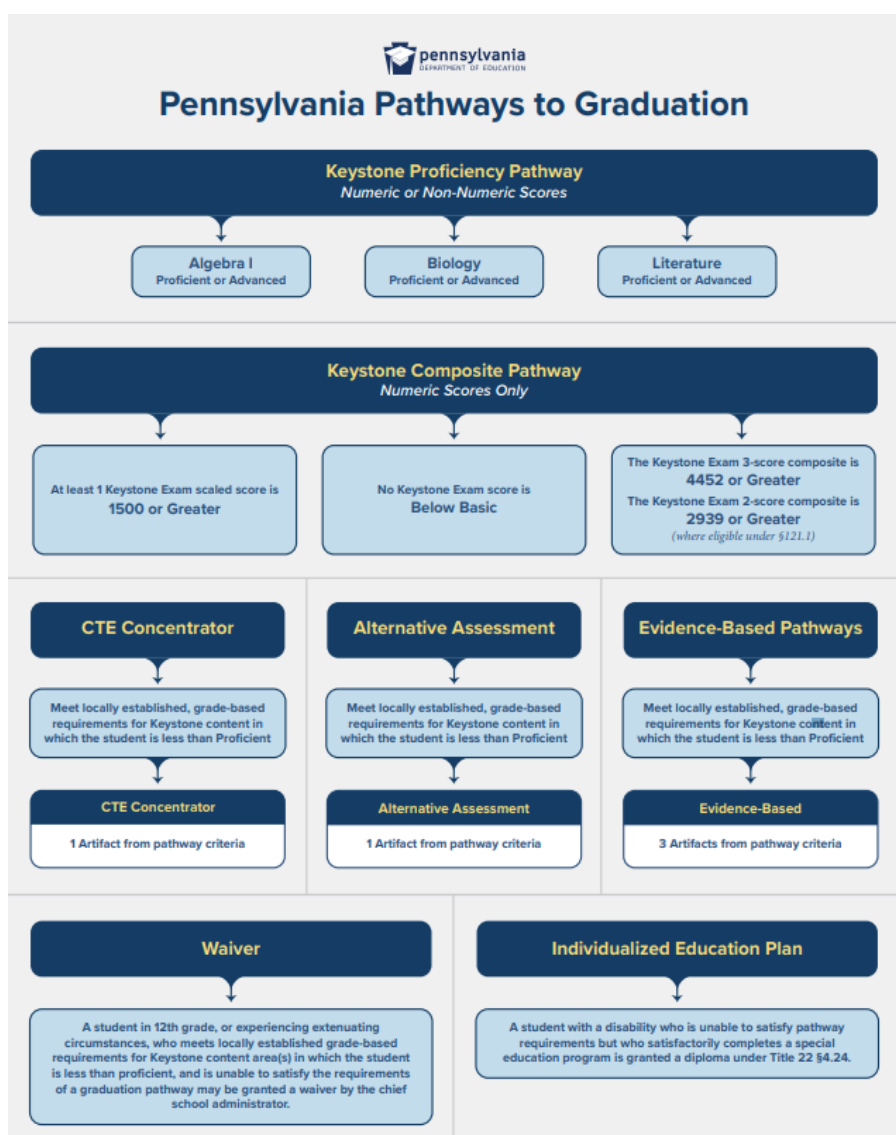
The minimum high school graduation requirements as set forth by the Pennsylvania Department of Education and the Northgate School Board.

English	4.0
Social Studies / Government	4.0
Mathematics / Algebra*	3.0
Science	3.0
Computer Science or Digital Systems	1.0
Business Communications and Personal Finance	1.0
Physical Education	1.0
Health	0.5
CORE COURSE TOTAL	17.5
Electives	7.0
TOTAL	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.*

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/year 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). 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.



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 (if doubled up within one year)
English (4 credits)					
Social Studies (4 credits)					
Mathematics (3 credits)					
Science (3 credits)					
Business Communications & Personal Finance (1 credit)					
Computer Science Course (1 credit)					
Physical Education (1 credit)					
Health (0.5 credit)					
Electives (7.0 credits)					
Keystone Exam Proficiency	Algebra		Biology		Literature

GRADING SYSTEM

Percent	Grade	Weighted Grade Points by Course Category for High School Courses	
		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 Numeric Grade Average, Advanced Placement and CIHS Courses are awarded an additional 10 percentage points to the 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. Industry-earned credentials will be noted on a student's transcript. These credentials are typically earned through 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 average of all numerical grades a student receives in a course or across multiple courses. 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

Successful career planning begins with understanding each student's unique abilities, interests, and goals. Northgate High School students are encouraged to build and regularly update their Northgate Educational Plan (NEP) to include required courses as well as career-specific electives aligned to their chosen career pathway. Students are encouraged to engage in transition activities that serve as a capstone to their pathway, such as work-based learning experiences and internships.

The Career Education and Work (CEW) Standards are part of the Pennsylvania Department of Education's required educational regulations and support Northgate's efforts to personalize student college and career learning. The 14 Career Clusters are included in the image below. Additional information may be found on the careertech.org website. Exploring these clusters helps students identify career areas that align with their interests, skills, and personality traits, understand common education and training requirements, and identify how their coursework prepares them for future career options. This process is especially valuable for students with multiple interests who are still determining the best career fit.





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 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, Superintendent

NORTHGATE CREDIT-BEARING DUAL ENROLLMENT COURSES

ENGLISH DEPARTMENT

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

HISTORY DEPARTMENT

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

MATH DEPARTMENT

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

SCIENCE DEPARTMENT

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

BUSINESS DEPARTMENT

NORTHGATE COURSE	ROBERT MORRIS UNIVERSITY COURSE
CIHS Computer Science	INFS 1020 “Fundamentals of Informational Technology”

NORTHGATE HIGH SCHOOL COURSES

ENGLISH

ENGLISH 1 1 Credit

English 1 provides a foundation for skills built upon in later English courses. Students will experience and work with various genres (fiction, non-fiction, and poetry), literary elements, and media related to the literature. Three to four research-based projects and presentations, including a formal research paper, are required. Some projects are completed in coordination with American Studies I. 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 2 1 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

Students are introduced to college-level, academic writing. The course prepares 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 awareness of variety of contexts, audiences, and purposes of academic writing. Each unit 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. The course is demanding in critical thinking, collaboration, time management, and reading, writing, speaking, and listening skills.

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

This is a survey course of literature and challenges students to interpret, analyze, and synthesize literature through discussion, creative projects, and critical essays. Students enhance communication skills developed throughout their academic careers. Students practice composition skills in response to literature. A supportive environment is provided including in-class workshops, drafting, and peer-to-peer evaluations so students demonstrate proficiency in reading and writing skills. Students have the opportunity to increase depth of cultural awareness, and examine literary perspectives and traditions with opportunities for discussion and deeper understanding of other cultures.

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 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 COMPOSITION 1 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 LEADERSHIP 1 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.

LEADERSHIP AND LEGACY IN TIMES OF ADVERSITY / Isha Project 1 Credit

This interdisciplinary course explores how individuals and communities have responded to injustice and adversity with resilience, courage, and leadership. Through the study of the Civil Rights Movement, Apartheid in South Africa, and the Holocaust, students examine the choices people made to create positive change and consider their own roles as future leaders. By the end of the course, students will develop a stronger sense of purpose, global awareness, and the skills needed to contribute meaningfully to their communities.

JOURNALISM AND MEDIA 1 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.

ESSENTIALS OF ENGLISH 1.....1 Credit

This foundational course is designed to strengthen students’ core writing and language skills and support growth as confident communicators. Using research-based practices grounded in the science of reading, students develop essential skills in sentence structure, grammar, vocabulary, and composition. Reading and writing are taught together, and students to analyze texts as models for their own writing. Students explore poetry and informational texts and learn strategies for planning, drafting, revising, and editing their work. The course emphasizes clarity, organization, and voice, helping students build the skills necessary to write effectively at the high school level.

ESSENTIALS OF ENGLISH 2.....1 Credit

This course focuses on building strong, independent readers through explicit instruction aligned with the science of reading. Students develop foundational skills in decoding, fluency, vocabulary, and comprehension while learning how the brain processes written language. Through guided practice with a variety of texts including fiction, nonfiction, and poetry, students strengthen their ability to analyze, interpret, and respond to what they read. Reading instruction is integrated with writing, grammar, and textual analysis to reinforce comprehension and critical thinking. By the end of the course, students are better prepared to read, understand, and engage with grade-level texts across content areas.

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 learn to model real-world situations using functions 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

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.

STATISTICS..... 1 Credit

Prerequisite: Successful completion of Geometry

This course is designed to prepare students for college-level statistics and to build strong analytical skills for a data-driven world. The course emphasizes mathematical reasoning, real-world application, and the ethical interpretation of data. Students explore one- and two-variable data, sampling methods, experimental design, probability, sampling distributions, and statistical inference. Through hands-on investigations and the use of technology, they learn to analyze variability, model relationships, and draw meaningful conclusions. Instruction is organized around three central themes: variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

CIHS ALGEBRA II 1 Credit / 3 Carlow Credits

Prerequisite: Successful completion of Algebra I and Geometry

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 AB..... 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 9th grade students. Students examine science topics through connected themes and concepts. All students will study science with a focus on laboratory skills, inquiry, and scientific writing. Students will rotate through unique science topics in order to be introduced to 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, is aligned to the PA Keystone Biology standards, and students will complete the Keystone Biology Exam at the end of the course. Areas of study include Cell Biology, Molecular Biology, Biochemistry, Evolution, Genetics, and Diversity of Life among Kingdoms. Lab investigations are included to reinforce key topics. Critical thinking is required and projects are assigned regularly. Scientific writings and readings are required. Classes are devoted to labs, inquiry observations, and scientific methodology.

CIHS AP BIOLOGY..... 1 Credit / 4 Carlow Credits

Prerequisites: Successful completion of Biology, Advanced/Proficient achievement on the Keystone Biology Exam, and Advanced/Proficient achievement on the Keystone Algebra Exam

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

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.

CIHS AP CHEMISTRY 1 Credit / 4 Carlow Credits

Prerequisite: Successful completion of CIHS Chemistry, Advanced/Proficient achievement on the Keystone Biology Exam, and Advanced/Proficient achievement on the Keystone Algebra 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 Algebra-based Physics. The goal is to provide students with an introductory physics experience. Students are expected to have a firm understanding of algebra. 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 apply theoretical concepts and mathematical interpretation in the conduction of laboratory experiments.

CIHS AP PHYSICS 1 1 Credit / 4 RMU Credits

Prerequisites: Successful completion of Algebra II and or Faculty Recommendation, Advanced/Proficient achievement on the Keystone Biology Exam, and Advanced/Proficient achievement on the Keystone Algebra Exam

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics by developing models of physical phenomena through inquiry-based lab investigations exploring concepts like systems, fields, force interactions, change, and conservation. This course is intended for any student interested in science related fields after high school.

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 and Biology

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. 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 to gain a greater understanding of ocean science. The course provides students an opportunity to explore an environment accounting for 80% of the biodiversity on Earth. Through integrated study of chemistry, biogeography, biology, and ecology, students learn to appreciate and understand the diverse science of the oceans and their inhabitants.

Genetics is a quarter-long, introductory course that will provide students with a review of 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 think critically concerning science's impact on our society through connections to current events in the world of genetics.

AVIATION I 1 Credit

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 course provides understanding of career opportunities in aviation and aerospace and the critical issues affecting the industry.

SOCIAL STUDIES

AMERICAN STUDIES I 1 Credit

This course serves as a foundation to the Social Studies program. Beginning with the age of exploration, students will be expected to reflect and demonstrate understanding of the early settlement of North America by Europeans; development of the thirteen colonies; the era of the American Revolution; 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 provide 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 provide 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 taken during 11th grade. The 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. A variety of media will be used and the development of reading, writing, and interpretive skills will be emphasized.

CIHS GOVERNMENT 1 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 HISTORY 1 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.

This accelerated course is similar to those offered to college freshmen and consists of a survey of the history of the United States from the time of discovery of the western hemisphere to the present. Major forces, events, and personalities that affected the evolution of our nation's 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 French I is to learn the language as a means of communication. Students will be introduced to all five language-learning skills: reading, writing, listening, speaking, and culture. Emphasis will be on how to use these skills in everyday communication. The main language of instruction will be French and the students will be evaluated through both written and oral exams.

FRENCH II 1 Credit

Prerequisite: Successful completion of French I

Introductory lessons are devoted to review of structures previously studied. Procedures used in French I continues with additional techniques at an advanced level. Attention is given to the development of grammar for acquiring greater skill in reading, writing, and speaking. There will be 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 improve comprehension of spoken French. A segment of the course is also designed to present students a picture of the French, their humor, basic values, and civilization. Emphasis of this course will be on student output; using and applying what they have learned previously, orally and in writing. This course will be conducted in the target language.

FRENCH IV 1 Credit

Prerequisite: Successful completion of French III

Level IV students will be able to express themselves in both practical, everyday language, and on a more abstract level. This will be accomplished by learning and applying more complex grammatical functions. Students will be evaluated weekly on oral output, aural comprehension and written expression. A segment of this course will also focus on the history and civilization of French culture.

SPANISH I 1 Credit

Spanish I is intended to be a student's first contact with the language. Students learn vocabulary and grammatical concepts with the aim of communication through speaking, listening, reading, and writing across various situations. 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 on the learning and techniques of Spanish I. Emphasis is placed on building useful vocabulary, learning more difficult grammar, and increasing facility in the core communicative skills of listening, speaking, reading, and writing. Students continue to develop understanding of 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 students' communicative skills of speaking, listening, writing, and reading. Students continue to build vocabulary and grammatical knowledge. Current events and podcasts provide opportunities for students to hone 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

Spanish IV is designed to cover advanced linguistic concepts. Activities will center on communicative skills needed for dialogues, impromptu conversations, questions and answers, and individual speeches, as well as frequent conversations on a one-to-one basis. The study of the subjunctive mood is included as well. Students study 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 Spanish-speaking countries and their cultures. Each year students read one or more novels in Spanish.

HEALTH AND PHYSICAL EDUCATION

HEALTH 0.50 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 aims to provide students with the necessary skills to stay active throughout their entire lives. Revolving around the five health-related fitness components, students will achieve the daily recommended amount of physical activity. Through activities ranging from weightlifting to team sports, students will be exposed to a wide variety of physical activities to help them find an outlet for staying active long after they graduate from high school. *All students in 9th grade will be scheduled for physical education. Students in grades 10, 11, and 12 may take additional credits as elective credits.*

PERSONAL FITNESS 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.

BUSINESS AND TECHNOLOGY EDUCATION

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

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 acquire basic concepts and terminology related to information systems. The course is aligned with the College Board's AP CS Principles course syllabus.

DIGITAL SYSTEMS and CYBERSECURITY with AI (Artificial Intelligence)..... 1 Credit

A practical, project-based course introducing students to the Internet, Python programming language, digital information literacy, cybersecurity principles, and foundational artificial intelligence concepts. Students will learn to build simple websites, evaluate and protect digital data, understand online risks and ethics, and apply basic AI tools responsibly. Emphasis is on real-world skills, safe online practices, and career-ready digital fluency.

BUSINESS COMMUNICATIONS AND PERSONAL FINANCE 1 Credit

This course develops essential communication and career-readiness skills—such as professional behavior, resume and cover-letter writing, job search strategies, and interview techniques—alongside teamwork and workplace communication. In the second half, students study Pennsylvania Personal Finance standards to build practical money-management skills, including budgeting, saving and investing, banking, credit and debt, insurance, and consumer protection. Through projects, mock interviews, and real-world scenarios, learners apply skills to prepare for work, postsecondary pathways, and responsible financial citizenship. *This course is a requirement for graduation.*

ENTREPRENEURSHIP 1 Credit

This course introduces students to idea generation, business planning, marketing, and financial basics through hands-on projects. Students develop a startup concept, create a business model and pitch deck, and refine presentation and teamwork skills. The course culminates in a pitch competition where teams present their ventures to judges for feedback and awards. Practical lessons focus on problem-solving, creativity, and real-world entrepreneurial thinking.

MARKETING 1 Credit

This introductory marketing course explores core concepts, including market research, target audiences, branding, advertising, and the marketing mix. Students create real-world campaigns, analyze consumer behavior, and practice designing promotional materials across digital and print media.

VISUAL ARTS

VISUAL ART 9 0.50 Credit

Grade 9 3D Art is a hands-on studio course that introduces students to sculptural thinking, three-dimensional design, and conceptual artmaking through a nine-week exploration of materials and processes such as wire, plaster, and ceramics. Students develop technical skills, craftsmanship, and spatial reasoning by transforming contour line drawings into wire sculptures, constructing full-figure plaster works, and creating ceramic pieces. The course culminates in a student-driven conceptual art project in which each student develops a theme, pitches a studio proposal, and produces a finished artwork that integrates at least two skills learned in class.

ART I 1 Credit

This course introduces students to major artistic movements—Surrealism, Impressionism, and Realism—through a balance of historical study and hands-on studio practice. Working across drawing, painting, sculpture, and mixed-media approaches, students explore how artists have used materials to express ideas, capture impressions, and represent reality with accuracy and craftsmanship. Students build skills in visual literacy, craftsmanship, and creative problem-solving while developing a portfolio that demonstrates growth in technique, composition, and conceptual thinking.

ADVANCED ART II 1 Credit

Prerequisite: Successful completion of Art I

This advanced art course provides students a deeper, more independent studio experience where identity, personal voice, and conceptual development drive the work through a sustained artistic investigation that moves beyond isolated projects. Students work across a wide range of media to identify the materials and processes that best express their ideas while building an AP Studio Art–modeled portfolio. Emphasizing artistic integrity, the course expects ethical documentation, proper attribution of sources, and authentic creation, with a clear expectation that generative AI is not used to produce artwork, making this course ideal for students ready to take creative risks and develop a meaningful, cohesive body of work that reflects both skill and voice.

ART INDEPENDENT STUDY 1 Credit

Prerequisite: Successful Completion of Advanced Art 2 and teacher recommendation

This honors-level, self-directed studio course is for highly motivated students who are ready for individualized, professional-level artistic research. Modeled after a college studio experience, a pre-professional apprenticeship, and the expectations of an AP Art & Design portfolio without requiring AP enrollment, the course invites students to design and carry out a personalized artistic investigation centered on a chosen medium, theme, problem, or inquiry. Students engage in portfolio development, project management, material experimentation, and critical writing while working with the instructor to set goals, establish timelines, and demonstrate weekly progress. Emphasizing independence and ownership of the creative process, students complete a professional quality portfolio suitable for college admissions or art school applications, optional AP Art & Design submission, scholarship opportunities, exhibitions, and continued personal creative development.

TECHNOLOGY EDUCATION

MATERIALS AND FABRICATION I 1 Credit

This hands-on course allows students to design and build teacher-approved projects using wood, metal, and plastics. Emphasis is on safe tool use, basic fabrication techniques, measuring and layout, and material selection. Students will complete individual projects from design through finishing, using process knowledge and problem-solving. Classroom instruction combines demonstrations, guided practice, and independent shop time to develop craftsmanship and technical reasoning.

MATERIALS AND FABRICATION II 1 Credit

Prerequisite: Successful Completion of Materials and Fabrication I

The level II course builds on foundational skills, guiding students through more advanced design and fabrication projects in wood, metal, and plastics. Safety, power tool proficiency, CNC and layout integration, and refined finishing methods are emphasized. Students plan and complete more complex projects while making design decisions and troubleshooting processes. Instruction blends demonstrations, independent shop work, and peer collaboration to strengthen technical skills and project management.

MATERIALS AND FABRICATION III 1 Credit

Prerequisite: Successful Completion of Materials and Fabrication II

Students are challenged to execute advanced, student-designed projects that integrate complex woodworking, metalworking, and plastic fabrication techniques. The course focuses on advanced materials processing, CNC programming, advanced fastening and joinery methods, and professional-grade finishing. Students undertake larger-scale projects, emphasizing design iteration, engineering principles, and workplace safety. Instruction includes mentorship, independent project time, and helps prepare students for careers or postsecondary study.

INNOVATION AND ENGINEERING

INNOVATIVE DESIGN I 1 Credit

Students apply the engineering design process and CAD (Computer Aided Design) tools to complete a series of design challenges. They learn basic engineering concepts and explore manufacturing skills such as 3D printing, laser cutting, and CNC machining to prototype and produce their designs.

INNOVATIVE DESIGN II 1 Credit

Prerequisite: Innovative Design I

Students build on prior CAD and engineering design experience to complete advanced, student-driven design challenges. They independently research, prototype, and refine projects using 3D printing, laser cutting, and CNC machining. The course emphasizes long-term project work, collaboration, and professional presentation of design solutions.

ROBOTICS 1 Credit

Prerequisite: Successful completion of Innovative Design

This course introduces students to robotics using the VEX V5 system, including building, programming, and controlling robots with motors and sensors. Students also explore manufacturing concepts and processes using the VEX CTE Workcell system. Hands-on activities develop problem-solving, design, and engineering skills while applying basic math and technical concepts in real-world contexts.

GRAPHIC DESIGN 1 Credit

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.

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. Marching Band is dedicated to practicing Marching Band-related music and content. Participation in all band events is mandatory. Events include all varsity football games, band festivals, parades, and community events scheduled during the first semester. Marching Band has two practices 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, pre band camp, and band camp are required in order to participate in the marching band.*

Concert Band is an advanced ensemble focused on developing individual and ensemble instrumental technique and performance artistry across wind, brass and percussion literature. The repertoire spans classical transcriptions, original wind ensemble works, jazz-infused selections, film and pop arrangements, and contemporary compositions. Emphasis is placed on tone production, intonation, rhythmic precision, stylistic interpretation, sight-reading, and leadership within the ensemble.

Related activities: Members of the Concert Band are eligible to participate in ensembles, such as Jazz Band. These groups rehearse after school. 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 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 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 per 120 clock hours. Internships receive a pass/fail grade.

WORK STUDY PROGRAM 1-4 Credits

Grade 12 students ONLY

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. 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.
- Students interested in the Work Study Program must be approved. A meeting with the student, parent, school counselor, and principal is required for approval.

SENIOR YEAR SCHEDULE REQUIREMENTS

Northgate School District's 24.5-credit requirement is considered the minimum number of credits required for graduation. We expect most students to exceed the minimum requirement. In Pennsylvania, high school students (grades 9–12) must receive a minimum of 990 hours of instructional time per school year (5.5 hours per day for 180 days). In the spring of their junior year, students will work with their school counselor to create a senior-year schedule that meets these state guidelines.

Seniors must be enrolled in four (4) credits each semester. This can be any combination of Northgate classes, Internship, and Work Study.

Seniors may work with their school counselor and administration to meet annual requirements through a combination of in-person coursework and approved educational experiences outside the classroom. Seniors may substitute coursework with outside learning experiences such as job shadowing, internships, or employment that equal the required 990 hours. Written parent and administrative approval is required. These experiences must be aligned to the student's postsecondary goals and should be designed to help them develop the skills needed for future success.

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 High School. Three credits are awarded each year to students successfully completing career coursework. A.W. Beattie Career Center credits and grades are included in 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, 10th, or 11th 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 Zyliniski: kim.zyliniski@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 PROJECT REQUIREMENTS

In grades 9 through 12, students learn important skills that will help them become responsible and productive citizens in their communities. The *Northgate Graduation Project* is designed to help students demonstrate these skills, including the ability to serve others, communicate professionally, and research and acquire careers. Below are the five components of the Graduation Project. The Graduation Project is an area of focus in ELA III (11th grade) and in each ELA course, grades 9 through 12, specific components of the overall project will be completed. All five components are required to be completed by March 31, 2027, except for the actual presentation, which will be scheduled before the end of April, 2027 for each. Specific details regarding the final presentation will be explained in ELA IV.

1. SMART FUTURES Modules

- ☐ 9th grade: Sessions 1, 2, 3, 4, 5, and 6
- ☐ 10th grade: Sessions 7, 8, 9, 10, and 11
- ☐ 11th grade: Sessions 12, 13, 14, 15, and 16

2. Job Shadow Experience

- ☐ Schedule and Participate in Job Shadow, and collect necessary signatures
- ☐ Job Shadow Questions

3. Community Service (8 hours required)

- ☐ Schedule and Complete Community Service Hours
- ☐ Complete Community Service Log to document hours

4. Professional Documentation

- ☐ Cover Letter
- ☐ Resume
- ☐ Standard Job Application
- ☐ Thank-You Letter

5. Senior Presentation

- ☐ Googles Slides/PowerPoint Presentation
- ☐ Presentation Rubric



NORTHGATE SCHOOL DISTRICT

NORTHGATE ONLINE LEARNING ACADEMY *HANDBOOK and COURSE CATALOG*

The purpose of *Northgate Online Learning Academy (NOLA)* is to offer Northgate students access to a flexible and innovative learning opportunity that prepares students for success. Through a partnership with [*Edgenuity*](#), Northgate students have the opportunity to complete online courses taught by Northgate teachers utilizing the Edgenuity Online Curriculum. All NOLA online courses align with PA State Standards, ensuring Northgate students are receiving high quality online learning.

Northgate Online Learning Academy students are considered full-time students of the Northgate School District; therefore, they are eligible for all activities and events offered to Northgate students. Students completing the Northgate Online Learning Academy Program and meeting all graduation requirements will receive a Northgate High School diploma.

PROGRAM OPTIONS

- **Full-Time:** Students complete all courses in an online asynchronous learning environment.
- **Credit Recovery:** Students who are credit deficient have the opportunity to complete accelerated online courses (with written district approval).
- **Additional Course Options:** Courses taken in addition to your planned course of study. The courses allow students to pursue their interests beyond the regular school day.

Please note: Students who are unsuccessful while enrolled in Northgate Online Learning Academy Full-Time will be unable to participate in NOLA Full-Time in the future. Student attendance is monitored daily and progress is documented weekly.

ENROLLMENT

Students interested in enrolling in the Northgate Online Learning Academy, need to contact their school counselor to begin the enrollment process. Students in grades 7-9 contact Mrs. Gallagher @ stacey.gallagher@northgatesd.net and students in grades 10-12 contact Mr. Burns @ zachary.burns@northgatesd.net. All student enrollment will be reviewed by administration prior to enrollment in online courses. Upon course completion, Northgate Online Learning Academy student grades will be uploaded to their Northgate School District Report Card.

ABOUT EDGENUITY

Through Edgenuity, Northgate offers an engaging, content-rich 7–12 curriculum that is customized to meet the unique needs of students. Courses feature extensive learning tools and can be taken for initial credit, as well as concept or credit recovery. Standards-aligned courses are taught by Northgate School District’s highly qualified, state-certified teachers who focus on providing the personalized attention students need to excel. With customizable delivery options, Northgate can offer your student additional flexibility and the support needed to ensure a successful cyber experience.

NAVIGATING NOLA

After approval through Administrative Review, a student is eligible to begin working on their assigned online courses.

1. All students enrolled in NOLA will receive a welcome letter providing their username and password, and step-by-step instructions for course completion.
2. When a student logs into their online course, they will see an outline of course topics.
3. NOLA parents will receive instructions on monitoring their student’s learning and achievement.
4. Students and parents always have access to course information through easy to follow student progress charts.

NORTHGATE SCHOOL DISTRICT POLICIES

STUDENT NOLA PARTICIPATION REQUIREMENTS

1. All NOLA courses will be scheduled per semester.
2. Full-time NOLA students will be enrolled in four (4) credits per semester in grades 9 - 12 and six (6) credits per year in grades 7 and 8.
3. Students who opt to participate in NOLA may only return to in-person instruction during the semester change. Students will **not** be permitted to voluntarily return to in-person instruction in the middle of a semester.
4. If a student does not maintain adequate academic progress and regular attendance, the principal may require the student to return to the building to complete their learning.
 - *Adequate academic progress* is defined as being within 10% of the target completion rate reflected on Edgenuity's progress report.
 - *Regular attendance* is defined as fewer than 10 unexcused absences.

ATTENDANCE - BOARD POLICY NO. 204

Regular attendance is necessary to ensure your best performance in school, and requires five (5) hours online **per course per week**. Attendance is automatically recorded by the Edgenuity system when a student logs in and time spent actively working is also monitored. Instances of truancy (habitual non-attendance at school) will be handled according to the Northgate School Board Policy and applicable state laws. Truancy will also result in the student being required to report to the school daily.

The minimum number of hours per week required by the NOLA Program:

- 1 Cyber Class = 5 hours per week
- 2 Cyber Classes = 10 hours per week
- 3 Cyber Classes = 15 hours per week
- 4 Cyber Classes = 20 hours per week
- 5 Cyber Classes = 25 hours per week

Procedures for students not working 5 hours per week on each cyber course:

- NOLA Coordinator will call or email to inform parents.
- Attendance Officer will initiate a truancy process after three unexcused absences.
- If the student continues to not work consistently the NOLA Coordinator will schedule a parent/student/teacher conference with the principal and school counselor.
- The student will be required to return to in-person instruction at the beginning of the next quarter.
- Alternate education placement may be considered if deemed necessary.

EXTRACURRICULAR ELIGIBILITY

Students must maintain passing grades, as reflected in the Athletics and Extracurricular Activities Handbook, and attend school to be eligible to participate in Northgate School District athletics and extracurricular activities. Grades are reported to the Athletic Director and factored into eligibility requirements. **The grade used to determine eligibility is the “Actual Grade”.** *See below for grading definitions.* Students must remain up-to-date with their cyber assignments. Questions regarding eligibility need to be directed to the student services principal.

QUARTERLY GRADING PERIODS 2026-2027

Quarter	Start Date	End Date
1	Thursday, August 20, 2026	Monday, October 26, 2026
2	Tuesday, October 27, 2026	Tuesday, January 19, 2027
3	Wednesday, January 20, 2027	Wednesday, March 31, 2027
4 (Grades 7-11)	Thursday, April 1, 2027	Thursday, June 3, 2027 @ 11:59 p.m.
4 (Grade 12 ONLY!)	Thursday, April 1, 2027	Friday, May 28, 2027 @ 12:00 p.m.

GRADING POLICY

All marks or grading district-wide shall be designated with the following letters:

- A Excellent 90-100%
- B Good 80-89%
- C Average 70-79%
- D Below Average 60-69%
- F Not Passing 0-59%
- I Incomplete
- P* Pass *No QPA applied to credit recovery - student does earn credit for graduation
- F* Fail
- W Withdrawn with a failing grade with no credit towards graduation

All NOLA students will receive a letter grade and percentage on their report card. Students enrolled in the Northgate Online Learning Academy receive credits from the Northgate School District. Students will receive a grade in PowerSchool for each course once the course timeline is completed. Students have 24/7 access to their grades and course progress through their Edgenuity account.

On the Edgenuity progress report, a student will see three different types of grades; **Actual Grade**, **Overall Grade**, and **Relative Grade**. The Actual Grade is the grade that is taken into account for athletic eligibility. The Relative Grade is the student's grade if the grading period was over on that day.

Actual Grade: This is the grade adjusted for progress if a student is behind. This score does not assume zeros for uncompleted work; simply penalizes for falling behind. Assigning zeros could swing a grade dramatically depending on the weight of the uncompleted activities. Any ungraded, but submitted work, does not count against the grade. Once graded, it is factored into the calculation. This metric incorporates a penalty for a student being behind their target. It makes use of a ratio that represents the student's actual progress divided by his target progress. In order for this metric to populate, a student's course must have a start date and target date assigned.

Overall Grade: This is the weighted average grade for completed activities based on the grade weights for each type of activity. If the student's course grade has a weight for an activity category the student has not yet completed, that weight will be spread among the other categories proportionally. For example, one quiz will not have a greater impact than another. This grade does not incorporate any penalties for late or missing work. Teachers should reference this grade daily to determine whether a student is beginning to struggle with mastering the content. If this metric begins to decrease, the student is not mastering content.

Relative Grade: This is the grade that a student would receive if they stopped working and received 0% for all unscored, counted activities. This grade incorporates a penalty for not completing work. **This is the grade that will count as the final course grade.**

COMPUTER AND NETWORK USE

All NOLA students will have a Northgate email address and a provided device. All students are expected to follow the acceptable use policy.

GENERAL COMPUTER USE

Computers are provided for students to participate in computer-based learning, conduct research and complete assignments. Access to computers is given to students who agree to act in a considerate and responsible manner. Access is a privilege - not a right. As such, general school rules for behavior and communications apply and users must comply with district standards. Students are responsible for good behavior on school computer networks just as they are in a classroom or a school hallway. Access is a privilege - not a right. As such, general school rules for behavior and communications apply and users must comply with district standards.

Violations of this policy by students will be handled within the guidelines of the student code of conduct. Violations may result in a loss of access as well as other disciplinary or legal action (as outlined in the Discipline Policy). Multiple offenses may result in the loss of all district computer privileges.

The following are some examples of inappropriate behavior:

- Sending or displaying offensive messages or pictures
- Using obscene language
- Giving personal information, such as complete name, phone number, address, or identifiable photo, without permission from teacher and parent or guardian
- Harassing, insulting, or attacking others
- Damaging or modifying computers, computer systems, or computer networks
- Violating copyright laws
- Using others' passwords
- Trespassing in others' accounts, folders, work, or files
- Intentionally wasting limited resources
- Employing the network for commercial purposes, financial gain, or fraud
- Installation of unapproved software – Chat instant message programs
- Modifying software settings
- Creating public email accounts (Hotmail, Yahoo, etc) that would be used for sending data to/from home and school.

DRESS CODE

When students are in the building, they will be expected to follow the district's dress code policy # 221; additionally, when students are attending meetings virtually, they will be expected to adhere to the following guidelines:

- Students must wear clothing including both a shirt with pants or skirt, or the equivalent (for example dresses, leggings, or shorts) and shoes.
- Clothing must cover areas from one armpit across to the other armpit, down to approximately 3 to 4 inches in length on the upper thighs and tops must have shoulder straps.
- Clothing must cover undergarments.
- Clothing or jewelry displaying indecent writing, profanity, depictions or allusions to drugs, alcohol, and sex, including slogans, are inappropriate and may not be worn.
- Dress must not interfere with the educational process or the rights of others.
- Apparel of or relating to the designation of gang membership, affiliation, or promotion is prohibited.
- Clothing should not in any manner affect the safety or the welfare of the wearer or other students or staff.

ACADEMIC INTEGRITY REGULATIONS

Students' grades should reflect their individual efforts and achievements. It is the responsibility of each student to act in an ethical and responsible manner on all assignments. Therefore, cheating, plagiarism, and assisting others to do so are all violations of academic integrity.

This includes the following: Cheating, defined as using another individual's work as your own. This includes copying homework and assignments, sharing test information, using "cheat sheets", or prohibited texts or materials. Plagiarism, defined as representing the words, ideas, or creations of another person as one's own. This includes copying another person's work or ideas without giving proper credit, cutting and pasting from the Internet or other database sources, copying from texts, or paraphrasing without giving credit to the original source. Violating federal copyright laws by using images downloaded from the Internet or other sources for personal use, except for classroom assignments. Consequences of the above will be determined by the online teacher and may include:

- Failure on the assignment.
- Failure for the course for major assignments such as term papers, culminating projects and presentations, and those assignments designated as required in a course of study.
- Possible disciplinary action.

BULLYING/CYBERBULLYING - BOARD POLICY NO. 249

The Board is committed to providing a safe, positive learning environment for district students. The Board recognizes that bullying creates an atmosphere of fear and intimidation. Detracts from the safe environment necessary for student learning, and may lead to more serious violence. Therefore, the Board prohibits bullying by district students.

Bullying means an intentional electronic, written, verbal or physical act or series of acts directed at another student or students, which occurs in a school setting that is severe, persistent or pervasive and has the effect of doing any of the following:

1. Substantial interference with a student's education.
2. Creation of a threatening environment.
3. Substantial disruption of the orderly operation of the school.

Bullying is defined in this policy, including cyberbullying.

School setting means in the school, on school grounds, in school vehicles, at a designated bus stop or at any activity sponsored, supervised or sanctioned by the school.

The Board prohibits all forms of bullying by district students. The Board encourages students who have been bullied to promptly report such incidents to the building principal or designee. The Board directs that complaints of bullying shall be investigated promptly, and corrective action shall be taken when allegations are verified. Confidentiality of all parties shall be maintained, consistent with the district's legal and investigative obligations. No reprisals or retaliation shall occur as a result of good faith reports of bullying.

Each student shall be responsible to respect the rights of others and to ensure an atmosphere free from bullying.

The Superintendent or designee shall monitor implementation of this policy. The Superintendent or designee shall ensure that this policy and administrative regulations are reviewed annually with students. The Superintendent or designee, in cooperation with other appropriate administrators, shall review this policy every three (3) years and recommend necessary revisions to the Board.

District administration shall annually provide the following information with the Safe School Report:

1. Board's Bullying Policy
2. Report of bullying incidents
3. Information on the development and implementation of any bullying prevention, intervention or education programs

The Code of Student Conduct, which shall contain this policy, shall be disseminated annually to students. This policy shall be accessible in every classroom. The policy shall be posted in a prominent location within each school building and on the district website, if available.

Education

The district may develop and implement bullying prevention and intervention programs. Such programs shall provide district staff and students with appropriate training for effectively responding to, intervening in and reporting incidents of bullying.

Consequences For Violations

A student who violates this policy shall be subject to appropriate disciplinary action consistent with the Code of Student Conduct, which may include:

- Counseling within the school
- Parental conference
- Loss of school privileges
- Transfer to another school building, classroom or school bus
- Exclusion from school-sponsored activities
- Detention
- Suspension
- Expulsion
- Counseling/Therapy outside of school
- Referral to law enforcement officials.

BUILDING STUDENT HANDBOOK

Northgate Online Learning Academy students are expected to comply with the student handbook published for their building. Each building's handbook is available on the school's website and can be obtained by calling the school counseling office at 412-732-3300 ext. 1012.

FREQUENTLY ASKED NOLA QUESTIONS

Why should I choose the Northgate Online Learning Academy instead of a cyber charter option? By choosing the Northgate Online Learning Academy, your student will receive the support of Northgate School District Teachers and will keep pace with their peers attending the brick and mortar school. All of the district resources, including counseling services, will be available to Northgate Online students. Students will also have the opportunity to participate in Northgate extracurricular activities and to earn a Northgate School District Diploma.

Will the school district supply the necessary technology? Northgate School District will supply each student with a Chromebook with a built-in camera and microphone. Families will need to provide internet service for their student(s) in order to access online learning.

What is a typical day like? The Northgate Online Learning Academy is an asynchronous learning environment. Students can complete their work at any time during the day or night. A Northgate Teacher can provide live support during preset office hours, at the student's request.

How do students socialize? Students who participate in the Northgate Online Learning Academy are eligible to participate in all Northgate extracurricular activities such as athletics, marching band, clubs, dances, etc.

Can a student attend Beattie Career Center and do the Northgate Online Learning Academy? Yes, a student can attend Beattie in the morning and then opt for online learning in the afternoon for their other classes.

What is the role of the parent? Parents are expected to monitor their student's progress and assist them in meeting the requirements of Northgate's Online Learning Academy. This adult will be a key player on the student's learning team, partnering with teachers and actively working alongside him or her every day.

What if a student has an IEP? Northgate School District adheres to applicable federal and state laws that govern special education. Each student with an IEP is assigned a special education teacher. The special education teacher works with a regular education teacher, parent or guardian, and other team members to create an appropriate IEP and implement each student's specially designed instruction.

Do students have to log in and log out at set times each day? In order for a student's legal attendance to be counted, he/she MUST log in each day that school is in session. If the student skips logging in, it is the equivalent of being absent from school. If students miss attendance at the school building, they are marked absent for the day. It is the same in the virtual environment.

NORTHGATE ONLINE LEARNING ACADEMY

COURSE OFFERINGS

Courses listed are subject to change based on instructor availability.

ENGLISH LANGUAGE ARTS

ENGLISH LANGUAGE ARTS 7

Students grow as readers, writers, and thinkers in this course. With engaging literary and informational texts, students learn to think critically, analyze an author's language, and cite evidence to support ideas. Students read excerpts from stories, poetry, and nonfiction. Explicit modeling and ample opportunities for practice help students sharpen their vocabulary, grammar, and listening skills. Students also respond routinely to texts they have read. In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative formats. In this full-credit course, students develop a mastery of reading, writing, and language arts skills.

ENGLISH LANGUAGE ARTS 8

In this course, students build on their knowledge and blossom as thoughtful readers and clear, effective writers. A balance of literary and informational texts engage students throughout the course in reading critically, analyzing texts, and citing evidence to support claims. Students sharpen their vocabulary, grammar, and listening skills through lessons designed to provide explicit modeling and ample opportunities to practice. Students also routinely write responses to texts they have read and use more extensive, process-based lessons to produce full-length essays in narrative, informative, analytical, and argumentative formats. In this full-credit course, students develop a mastery of reading, writing, and language arts skills.

ENGLISH LANGUAGE ARTS I

This English course engages students in literary analysis and inferential evaluation of great texts both classic and contemporary. While critically reading fiction, poetry, drama, and literary nonfiction, students will master comprehension and literary analysis strategies. Interwoven in the lessons across two semesters are activities that encourage students to strengthen their oral language skills and produce clear, coherent writing. Students will read a range of classic texts such as Homer's *The Odyssey*, Shakespeare's *Romeo and Juliet*, and Richard Connell's "The Most Dangerous Game." They will also study short but complex texts, such as influential speeches by Dr. Martin Luther King Jr., Franklin D. Roosevelt, and Ronald Reagan. Contemporary texts by Richard Preston, Julia Alvarez, and Maya Angelou round out the course.

ENGLISH LANGUAGE ARTS II

Focused on application, this English course reinforces literary analysis and twenty-first-century skills with superb pieces of literature and literary nonfiction, application e-resources, and educational interactives. Each thematic unit focuses on specific literary analysis skills and allows students to apply them to a range of genres and text structures. As these units meld modeling and application, they also expand on training in media literacy, twenty-first century career skills, and

the essentials of grammar and vocabulary. Under the guidance of the eWriting software, students also compose descriptive, persuasive, expository, literary analysis, research, narrative, and compare-contrast essays.

ENGLISH LANGUAGE ARTS III

This English course invites students to delve into literature from early voices through contemporary works. Students engage in literary analysis and inferential evaluation of great texts as the centerpieces of this course. While critically reading fiction, poetry, drama, and expository nonfiction, students master comprehension and literary analysis strategies. Interwoven in the lessons across two semesters are tasks that encourage students to strengthen their oral language skills and produce creative, coherent writing. Students read a range of short but complex texts, such as works by Ralph Waldo Emerson, Emily Dickinson, Herman Melville, Nathaniel Hawthorne, Paul Laurence Dunbar, Martin Luther King, Jr., F. Scott Fitzgerald, Sandra Cisneros, Amy Tan, and Dave Eggers.

ENGLISH LANGUAGE ARTS IV

This English course offers fascinating insight into literary traditions. With interactive introductions and historical contexts, this full-credit course connects philosophical, political, religious, ethical, and social influences of each time period to the works of many notable authors, such as Chaucer, William Shakespeare, Queen Elizabeth I, Elizabeth Barrett Browning, and Virginia Woolf. Adding an extra dimension to the British literary experience, this course also exposes students to world literature, including works from India, Europe, China, and Spain.

AP ENGLISH LANGUAGE & COMPOSITION

This college-level course prepares students for the AP English Language and Composition Exam while exploring and analyzing a variety of rhetorical contexts. This is a fast-paced, upper-level course designed for highly motivated students. Multiple opportunities are provided to enhance test-taking skills through critical reading, writing, classroom assignments, and discussion activities. AP English Language and Composition practice assessments and essays will be given throughout the course as well. This course provides students an opportunity to increase knowledge concerning prose of many styles and genres, including essays, journalistic writing, political writing, science writing, nature writing, autobiographies/biographies, diaries, speeches, history writing, and critical writing. Throughout the course, there is an intense focus on writing and revising expository, analytical, and argumentative essays to prepare students for a broad range of writing purposes.

AP ENGLISH LITERATURE & COMPOSITION

English Literature and Composition is designed to be a college/ university-level course. This course equips students to critically analyze all forms of literature in order to comment insightfully about an author's or genre's use of style or literary device. Students will also interpret meaning based on form; examine the trademark characteristics of literary genres and periods; and critique literary works through expository, analytical, and argumentative essays.

As students consider styles and devices, they will apply them to their creative writing. In addition to exposing students to college-level English course work, this course prepares them for the AP English Literature and Composition Exam.

ENGLISH LANGUAGE ARTS ELECTIVES

EXPOSITORY READING AND WRITING

This elective English course is designed to develop critical reading and writing skills while preparing high school students to meet the demands of college-level work. While students will explore some critical reading skills in fiction, poetry, and drama the focus of this course will be on expository and persuasive texts and the analytical reading skills that are necessary for college success. Students will read a range of short but complex texts, such as works by Walt Whitman, Abraham Lincoln, Cesar Chavez, Martin Luther King Jr., Langston Hughes, Julia Alvarez, Edna St. Vincent Millay, and Gary Soto.

BUSINESS ENGLISH

In this full-year course, students will use technology to develop research, organization, and written and oral communication skills as they relate to a business setting. Students will learn how to communicate appropriately by investigating nonverbal and verbal communication as it applies in the workplace. These skills will help prepare students for careers or employment within Business Administration and Management career pathways such as business management, administrative services, medical administration, and office management.

MATHEMATICS

MATHEMATICS 7

This course begins with an in-depth study of proportional reasoning during which students utilize concrete models such as bar diagrams and tables to increase and develop conceptual understanding of rates, ratios, proportions, and percentages. Students' number fluency and understanding of the rational number system are extended as they perform operations with signed rational numbers embedded in real-world contexts. In statistics, students develop meanings for representative samples, measures of central tendency, variation, and the ideal representation for comparisons of given data sets. Students develop an understanding of both theoretical and experimental probability. Throughout the course, students build fluency in writing expressions and equations that model real-world scenarios. They apply their understanding of inverse operations to solve multi-step equations and inequalities. Students build on their proportional reasoning to solve problems about scale drawings by relating the corresponding lengths between objects. The course concludes with a geometric analysis of angle relationships, area, and volume of both two- and three-dimensional figures.

MATHEMATICS 8

The course begins with a unit on input-output relationships that builds a foundation for learning about functions. Students make connections between verbal, numeric, algebraic, and graphical representations of relations and apply this knowledge to create linear functions that can be used to model and solve mathematical and real-world problems. Technology is used to build deeper connections among representations. Students focus on formulating expressions and equations, including modeling an association in bivariate data with a linear equation, and writing and

solving linear equations and systems of linear equations. Students develop a deeper understanding of how translations, rotations, reflections, and dilations of distances and angles affect congruency and similarity. Students develop rules of exponents and use them to simplify exponential expressions. Students extend rules of exponents as they perform operations with numbers in scientific notation. Estimating and comparing square roots of non-perfect squares to perfect squares exposes students to irrational numbers and lays the foundation for applications such as the Pythagorean theorem, distance, and volume.

ALGEBRA I

This full-credit course focuses on five critical areas: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. This course builds on the foundation set in middle grades by deepening students' understanding of linear and exponential functions and developing fluency in writing and solving one-variable equations and inequalities. Students will interpret, analyze, compare, and contrast functions that are represented numerically, tabularly, graphically, and algebraically. Quantitative reasoning is a common thread throughout the course as students use algebra to represent quantities and the relationships among those quantities in a variety of ways. Standards of mathematical practice and process are embedded throughout the course, as students make sense of problem situations, solve novel problems, reason abstractly, and think critically.

GEOMETRY

This full-credit course formalizes what students learned about geometry in the middle grades with a focus on reasoning and making mathematical arguments. Mathematical reasoning is introduced with a study of triangle congruence, including exposure to formal proofs and geometric constructions. Then students extend what they have learned to other essential triangle concepts, including similarity, right triangle trigonometry, and the laws of sines and cosines. Moving on to other shapes, students justify and derive various formulas for circumference, area, and volume, as well as cross-sections of solids and rotations of two-dimensional objects. Students then make important connections between geometry and algebra, including special triangles, slopes of parallel and perpendicular lines, and parabolas in the coordinate plane, before delving into an in-depth investigation of the geometry of circles. The course closes with a study of set theory and probability, as students apply theoretical and experimental probability to make decisions informed by data analysis.

STATISTICS

This full-credit course is designed to prepare students for college-level statistics and to build strong analytical skills for a data-driven world. The course emphasizes mathematical reasoning, real-world application, and the ethical interpretation of data. Students explore one- and two-variable data, sampling methods, experimental design, probability, sampling distributions, and statistical inference. Through hands-on investigations and the use of technology, they learn to analyze variability, model relationships, and draw meaningful conclusions. Instruction is organized around three central themes: variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

ALGEBRA II

This full-credit course focuses on functions, polynomials, periodic phenomena, and collecting and analyzing data. The course begins with a review of linear and quadratic functions to solidify a foundation for learning these new functions. Students make connections between verbal, numeric, algebraic, and graphical representations of functions and apply this knowledge as they create equations and inequalities that can be used to model and solve mathematical and real-world problems. As students refine and expand their algebraic skills, they will draw analogies among the operations and field properties of real numbers and those of complex numbers and algebraic expressions. Mathematical practices and habits of mind are embedded throughout the course, as students solve novel problems, reason abstractly, and think critically.

TRIGONOMETRY/PRECALCULUS

With an emphasis on function families and their representations, Precalculus is an introduction to advanced studies leading to calculus. The full-credit course briefly reviews linear equations, inequalities, and systems and moves purposefully into the study of functions. Students discover the nature of graphs and deepen their understanding of polynomial, rational, exponential, and logarithmic functions. Scaffolding rigorous content with clear instruction, the course leads students through an advanced study of trigonometric functions, matrices, and vectors. The course concludes with a short study of probability and statistics. Students use their geometry and algebra skills to begin their study of trigonometry. Students will be required to express understanding using qualitative, quantitative, algebraic, and graphing skills.

AP STATISTICS

This college-level course is designed to prepare students for the Advanced Placement (AP) Statistics exam. Major topics of study include exploring one-and two-variable data, sampling, experimentation, probability, sampling distributions, and statistical inference. These topics are organized into three big ideas: variation and distribution, patterns and uncertainty, data-based predictions, decisions, and conclusions.

AP CALCULUS AB

This college-level course prepares students for the Advanced Placement (AP) Calculus AB Exam. Major topics of study in this full-credit course include a review of pre-calculus, limits, derivatives, definite integrals, mathematical modeling of differential equations, and the applications of these concepts. Emphasis is placed on the use of technology to solve problems and draw conclusions. The course utilizes a multi-representative approach to calculus with concepts and problems expressed numerically, graphically, verbally, and analytically.

MATH ELECTIVES

MATHEMATICAL MODELS WITH APPLICATIONS

Broadening and extending knowledge and skills acquired in Algebra I, this course uses mathematics as a tool to model real-world phenomena students encounter daily, such as finance

and exponential models. Lessons cover financial topics, including growth, smart money, saving, and installment loan models. This two-semester course is a must-have for any high school student. Prior mathematical knowledge is expanded and new knowledge and techniques are developed through real-world application of useful mathematical concepts.

SCIENCE

SCIENCE 7

Examining a broad spectrum of the biological sciences, Science 7 is a full-credit course for middle school students that builds on basic principles of scientific inquiry and translates those skills to more complex, overarching biological themes. The course includes units that help students understand the definitions, forms, and classifications of living organisms and learn to analyze the diversity of each unique group of living organisms. Other units introduce students to the structures and functions of cells, cell theory, and cell reproduction. These larger themes are then applied to other topics, such as genetics, Darwinian theory, and human biology and health. An introduction of ecology draws all of these concepts together to examine the interrelationships that help to maintain life on Earth.

SCIENCE 8

This full-credit course focuses on basic concepts in chemistry and physics and encourages exploration of new discoveries in the field of physical science. The course includes an overview of scientific principles and procedures and has students examine the chemical building blocks of our physical world and the composition of matter. Additionally, students explore the properties that affect motion, forces, and energy on Earth. Building on these concepts, the course covers the properties of electricity and magnetism and the effects of these phenomena. As students refine and expand their understanding of physical science, they will apply their knowledge to complete interactive virtual labs that require them to ask questions and create hypotheses.

PHYSICAL SCIENCE 9

This full-credit course includes a blend of Life Science, Chemistry, and Physical Science. In life science, students will examine a broad spectrum of the biological sciences. Students will understand the definitions, forms, and classifications of living organisms and learn to analyze the diversity of each unique group of living organisms. Other units introduce students to the structures and functions of cells, cell theory, and cell reproduction. In physical science, students focus on basic concepts in chemistry and physics. The course includes an overview of scientific principles and procedures and has students examine the chemical building blocks of our physical

world and the composition of matter.

BIOLOGY

This compelling full-credit course engages students in the study of life and living organisms and examines biology and biochemistry in the real world. This course encompasses traditional concepts in biology and encourages exploration of new discoveries in this field of science. The components include biochemistry, cell biology, cell processes, heredity and reproduction, the evolution of life, taxonomy, human body systems, and ecology.

CHEMISTRY

This rigorous, full-credit course engages students in the study of the composition, properties, changes, and interactions of matter. The course covers the basic concepts of chemistry and includes virtual laboratory experiments that encourage higher-order thinking applications. The components of this course include chemistry and its methods, the composition and properties of matter, changes and interactions of matter, factors affecting the interactions of matter, electrochemistry, organic chemistry, biochemistry, nuclear chemistry, mathematical applications, and applications of chemistry in the real world.

AP BIOLOGY

This full-credit, college-level course is designed to prepare students for the Advanced Placement (AP) Biology exam. Units of study include Biochemistry, Cells, Enzymes and Metabolism, Cell Communication and Cell Cycle, Gene Expression, Evolution and Genetic Diversity, and Ecology..

PHYSICS

This full-credit course acquaints students with topics in classical and modern physics. The course emphasizes conceptual understanding of basic physics principles, including Newtonian mechanics, energy, thermodynamics, waves, electricity, magnetism, and nuclear physics. Throughout the course, students solve mathematical problems, reason abstractly, and learn to think critically about the physical world. The course also includes interactive virtual labs in which students ask questions and create hypotheses.

SCIENCE ELECTIVES

ENVIRONMENTAL SCIENCE

Environmental science is a captivating and rapidly expanding field, and this course offers compelling lessons that cover many aspects of the field: ecology, the biosphere, land, forests and soil, water, energy and resources, and societies and policy. Through unique activities and material, high school students connect scientific theory and concepts to current, real-world dilemmas, providing them with opportunities for mastery in each of the segments.

EARTH AND SPACE SCIENCE

Students enrolled in this rigorous course will expand on the knowledge and skills developed in

middle school to explain more in-depth phenomena central to the earth and space sciences and to their daily lives. Students will gain an understanding of the universe and explore other topics such as Earth's history, structure, weather, biosphere, hydrosphere, atmosphere, resources, and the impact humans have on Earth's resources. The course includes interactive real-world examples throughout the lessons and application projects, as well as interactive lab simulations and in-school, hands-on lab options. Earth and Space Science is a two-semester course that will provide a solid foundation for understanding the physical characteristics that make the planet Earth unique and will examine how these characteristics differ among the planets of our solar system.

SOCIAL STUDIES

SOCIAL STUDIES 7

Providing students with an opportunity to learn the diverse history that has shaped our world, this course delves into the evolution of civilization from the rise of ancient empires through the twenty-first century. Middle school students enrolled in this exciting and informative course investigate the development of medieval societies, the effects of the Renaissance and the Reformation, and the progress made during various periods of revolution, industrialization, urbanization, and reform. Students analyze the effects of political conflicts and social issues on the continuing development and interdependence among nations in the modern world. Students are exposed to diverse cultures and learn to explore the past with historical empathy.

SOCIAL STUDIES 8

Designed to introduce students to the study of geography, this course helps students master important concepts in physical and human geography. Comprehensive and organized by region, this course helps students understand the Earth's physical and human diversity. Students analyze population and settlement patterns and evaluate the ways that human activities modify the physical environment. While studying humans around the world, students compare development, standards of living, systems of government, and economic factors across the globe. In addition, students gain a rich understanding of global cultures and the historical factors that have shaped the world around them. All units in the course are parallel and include studies in physical and human geography, ancient cultures, regional studies, and modern issues.

AMERICAN STUDIES I

U.S. History I is a yearlong course that dynamically explores the people, places, and events that shaped early United States history. This course stretches from the Era of Exploration through the Industrial Revolution, leading students through a careful examination of the defining moments that shaped the nation of today. Students begin by exploring the colonization of the New World and examining the foundations of colonial society. As they study the early history of the United States, students will learn critical-thinking skills by examining the constitutional foundations of U.S. government. Recurring themes such as territorial expansion, the rise of industrialization, and the significance of slavery will be examined in the context of how these issues contributed to

the Civil War and Reconstruction.

AMERICAN STUDIES II

U.S. History II is a yearlong course that examines the major events and turning points of U.S. history from the Industrial Revolution through the modern age. The course leads students toward a clearer understanding of the patterns, processes, and people that have shaped U.S. history. As students progress through each era of modern U.S. history, they will study the impact of dynamic leadership and economic and political change on our country's rise to global prominence. Students will also examine the influence of social and political movements on societal change and the importance of modern cultural and political developments. Recurring themes lead students to draw connections between the past and the present, between cultures, and among multiple perspectives.

GOVERNMENT

This course provides students with a practical understanding of the principles and procedures of government. The course begins by establishing the origins and founding principles of American government, review of the Constitution and its amendments, and investigating civil rights and liberties. Lessons introduce Supreme Court decisions to demonstrate the impact and importance of constitutional rights. Students study the function of government today and the role of citizens in the civic process and culminates in an examination of public policy and the roles of citizens and organizations in promoting policy changes. Throughout the course, students examine primary and secondary sources. Students also sharpen their writing skills in shorter tasks and assignments and practice outlining and drafting skills by writing full informative and argumentative essays.

SOCIAL STUDIES ELECTIVES

AP UNITED STATES HISTORY

This course surveys the history of the United States from the settlement of the New World to modern times and prepares students for the AP United States History Exam. The course emphasizes themes such as national identity, economic transformation, immigration, politics, international relations, geography, and social and cultural change. Students learn to assess historical materials, weigh the evidence and interpretations presented in historical scholarship, and analyze and express historical understanding in writing.

MODERN WORLD HISTORY

This course examines the major events and turning points of world history from the Enlightenment to the present. Students investigate foundational ideas that shaped the modern world in the Middle East, Africa, Europe, Asia, and the Americas, and then explore the economic, political, and social revolutions that have transformed human history. This rigorous study of modern history examines recurring themes, such as social history, democratic government, and the relationship between history and the arts, allowing students to draw connections between the past and the present, across cultures, and among multiple perspectives. Students use a variety of primary and secondary sources, to evaluate the reliability of historical evidence and to draw conclusions about historical events. Students also sharpen their writing

skills in shorter tasks and assignments and practice outlining and drafting skills by writing full informative and argumentative essays.

AP HUMAN GEOGRAPHY

Human Geography is a college-level course designed to prepare students for the AP Human Geography Exam. The goal of the course is to provide students with a geographic perspective through which to view the world. Through a combination of direct instruction, documentary videos, and online readings, students will explore geographic concepts, theories, and models; human-environment interactions; and interactions among human systems. Topics include population, culture, political organization of space, agricultural land use, industrialization, and urban land use. Students will demonstrate their understanding and acquisition of skills through essays, document-based questions, student collaborative activities, and practice AP exams.

WORLD HISTORY: 1450-PRESENT

Examining current global issues that impact our world today, this course takes a thematic approach to understanding the development of human systems, human understanding of the world, and human social organization. This high school course will challenge students to develop geographic skills, including learning to interpret maps, analyze data, and compare theories. Offering interactive content that will grow students' understanding of the development of modern civilization and human systems—from the agricultural revolution to the technological revolution—this course encourages students to analyze economic trends as well as compare global markets and urban environments.

AP UNITED STATES GOVERNMENT AND POLITICS

This college-level course is designed to prepare students for the AP United States Government and Politics exam. Students will study the Constitutional underpinnings and structure of the United States government, issues of politics and political parties, and topics in civil rights and public policy, demonstrating their understanding and acquisition of skills through written work, project-based activities, and practice exams.

ECONOMICS

This course invites students to broaden their understanding of how economic concepts apply to their everyday lives—including microeconomic and macroeconomic theory and the characteristics of mixed-market economies, the role of government in a free-enterprise system and the global economy, and personal finance strategies. Throughout the course, students apply critical-thinking skills while making practical economic choices. Students also master literacy skills through rigorous reading and writing activities. Students analyze data displays and write routinely and responsively in tasks and assignments that are based on scenarios, texts, activities, and examples. In more extensive, process-based writing lessons, students write full-length essays in informative and argumentative formats.

AP WORLD HISTORY: MODERN

This advanced study of world history explores historical themes common to societies around the world and across time periods, from 1200 to the present day. Emphasis is placed on document analysis, historical thinking skills, reasoning processes, and essay writing. Students will

demonstrate their understanding and acquisition of skills through written work, document-based questions, project-based activities, and practice exams.

BUSINESS AND COMPUTER TECHNOLOGY

ONLINE LEARNING AND DIGITAL CITIZENSHIP (MS CLASS)

In this one-semester course, students develop essential study skills for academic success, such as staying organized, managing time, taking notes, applying reading strategies, writing strong papers, and researching and properly citing information. Explicit modeling and ample practice are provided for each study skill to support student mastery. Instruction on how to be a responsible online learner is threaded throughout the course, and these skills are directly addressed in lessons on cyberbullying, staying safe online, and learning how to be a digital leader. A basic understanding of software and hardware and how to troubleshoot common technology issues are also taught. By the end of the course, students will have the tools they need to be academically successful in both traditional and digital learning environments.

COMPUTER SCIENCE PRINCIPLES

This course is designed for students in grades 9–10, although any students across grades 9–12 may enroll. This course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can affect the world. Students have creative, hands-on learning opportunities to create computer programs, develop web pages, design mobile apps, write algorithms, and collaborate with peers while building strong foundational knowledge. This course provides a solid foundation for more advanced study as well as practical skills that students can use immediately.

BUSINESS COMMUNICATIONS

**This course must be taken along with the Personal Finance course to meet graduation requirements.*

Beginning with an introduction that builds student understanding of the elements, principles, and characteristics of human communication, this course offers fascinating insight into verbal and nonverbal messages and cultural and gender differences in the areas of listening and responding. High school students enrolled in this course will be guided through engaging lectures and interactive activities, exploring themes of self-awareness and perception in communication. The course concludes with units on informative and persuasive speeches, and students are given the opportunity to critique and analyze speeches.

ENGINEERING AND PRODUCT DEVELOPMENT

This course provides an overview of the concepts of product engineering and development. Students analyze the life cycle of a product to prepare a product for distribution and for target markets. The course begins with building an understanding of the product life cycle, from the initial idea to drafting requirements to using 3-D modeling tools and other design tools. The final unit focuses on assembling the pieces within a project plan to achieve a product and evaluating the plans for a successful product launch. In addition, the course provides information about the different careers available to students interested in engineering, product development, and project management.

NEW APPLICATIONS: WEB DEVELOPMENT IN THE 21ST CENTURY

New Applications is a survey course that travels from the first software programs developed to facilitate communication on the Internet, to the new generation of mobile and native apps that access the Internet without reliance on a web browser. New Applications is also a practical course in how to develop a presence on the World Wide Web using WordPress and other available web-application tools. The goal of the course is to provide the learner insight into the rapidly evolving universe of programming and application development to support informed career decisions in an industry that is changing as quickly as it is growing.

SMALL BUSINESS ENTREPRENEURSHIP

This course is designed to provide the skills needed to effectively organize, develop, create, manage and own a business while exposing students to the challenges, problems, and issues faced by entrepreneurs. Throughout this course, students explore what kinds of opportunities exist for small business entrepreneurs and become aware of the necessary skills for running a business. Students become familiar with the traits and characteristics that are found in successful entrepreneurs and see how research, planning, operations, and regulations can affect small businesses. Students also learn how to develop plans for having effective business management, financing and marketing strategies.

SOFTWARE DEVELOPMENT TOOLS

This course introduces students to a variety of careers related to programming and software development. Students gather and analyze customer software needs and requirements, learn core principles of programming, develop software specifications, and use appropriate reference tools to evaluate new and emerging software. Students apply IT-based strategies and develop a project plan to solve specific problems and define and analyze system and software requirements.

INTRODUCTION TO INFORMATION TECHNOLOGY

This course introduces students to the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for

workers within the field of IT.

GENERAL ELECTIVES

HEALTH

This high-school health offering examines and analyzes various health topics. It places alcohol use, drug use, physical fitness, healthy relationships, disease prevention, relationships and mental health in the context of the importance of creating a healthy lifestyle. Throughout the course, students examine practices and plans they can implement in order to carry out a healthy lifestyle, and the consequences they can face if they do not follow safe practices. In addition, students conduct in-depth studies in order to create mentally and emotionally healthy relationships with peers and family, as well as nutrition, sleeping, and physical fitness plans. Students also examine and analyze harassment and bullying laws.

PHYSICAL EDUCATION

Exploring a combination of health and fitness concepts, this comprehensive and cohesive course explores all aspects of wellness. Offered as a two-semester course designed for high school students, coursework uses pedagogical planning to ensure that students explore fitness and physical health and encourages students to learn about the nature of social interactions and how to plan a healthy lifestyle. NOTE: This course contains content from both Healthy Living and Lifetime Fitness; to avoid duplication, students should take either those one-semester courses or this full-year course.

PERSONAL FINANCE

**This course must be taken along with the Business Communications course to meet graduation requirements.*

This required finance course teaches what it takes to understand the world of finance and make informed decisions about managing finances. Students learn more about economics and become more confident in setting and researching financial goals as they develop the core skills needed to be successful. In this one-semester course, students learn how to open bank accounts, invest money, apply for loans, apply for insurance, explore careers, manage business finances, make decisions about major purchases, and more. Students will be inspired by stories from finance professionals and individuals who have reached their financial goals.

STRATEGIES FOR ACADEMIC SUCCESS

Offering a comprehensive analysis of different types of motivation, study habits, and learning styles, this one-semester course encourages high school and middle school students to take control of their learning by exploring varying strategies for success. Providing engaging lessons that will help students identify what works best for them individually, this one-semester course covers important study skills, such as strategies for taking high-quality notes, memorization techniques, test-taking strategies, benefits of visual aids, and reading techniques.

CAREER PLANNING AND DEVELOPMENT

Introducing high school students to the working world, this year-long course provides the knowledge and insight necessary to compete in today's challenging job market. This relevant and timely course helps students investigate careers as they apply to personal interests and abilities, develop the skills and job search documents needed to enter the workforce, explore the rights of workers and traits of effective employees, and address the importance of professionalism and responsibility as careers change and evolve. This one-semester course includes lessons in which students create a self-assessment profile, a cover letter, and a résumé that can be used in their educational or career portfolio.

NON-CREDIT BEARING OPTIONS

VIRTUAL TUTOR: ACT

This course provides students with the opportunity to prepare to successfully complete the ACT college-entrance exam. Practice tests diagnose and target areas of opportunity, and students are prescribed individual study paths. The learning experience includes video-based instruction, interactive assignments, and frequent assessment opportunities to track progress.

VIRTUAL TUTOR: SAT

This test preparation course effectively prepares students for all sections of the SAT exam. Course content is broken into strands, allowing students to focus on each subject extensively before moving on to the next area of study. Within each strand, a diagnostic pretest identifies students' strengths and weaknesses and tailors a personalized study plan for each test-taker.

VIRTUAL TUTOR: PSAT

This course provides students with the opportunity to prepare for success on the PSAT. Practice tests diagnose and target areas of opportunity, and students are prescribed individual study paths. The learning experience includes video-based instruction by highly qualified teachers, interactive assignments, and frequent assessment opportunities to track progress.

VIRTUAL TUTOR: GED

This test preparation course effectively prepares students for all sections of the GED exam. Course content is broken into strands, allowing students to focus on each subject extensively

before moving on to the next area of study. Within each strand, a diagnostic pretest identifies students' strengths and weaknesses and tailors a personalized study plan for each test-taker.

VIRTUAL TUTOR: HISET

This test preparation course effectively prepares students for all sections of the HiSET exam. Course content is broken up into strands, allowing students to focus on each subject extensively before moving on to the next area of study. Within each strand, a diagnostic pretest identifies students' strengths and weaknesses and tailors a personalized study plan for each test-taker.

VIRTUAL TUTOR: TASC

This test preparation course effectively prepares students for all sections of the TASC test. Course content is broken up into strands, allowing students to focus on each subject extensively before moving on to the next area of study. Within each strand, a diagnostic pretest identifies students' strengths and weaknesses and tailors a personalized study plan for each test-taker.

VIRTUAL TUTOR: COMPASS

This course reviews the concepts and skills essential for college readiness as measured by the COMPASS post-secondary placement exam. In this course, students complete a diagnostic pretest for each set of skills that assesses specific areas of strength and weakness. Based on the assessment results, the student receives a personalized learning plan, providing the most efficient and effective preparation possible.

VIRTUAL TUTOR: ACCUPLACER

This course reviews the concepts and skills essential for college readiness as measured by the Next Generation ACCUPLACER post-secondary placement exam. In this course, students complete a diagnostic pretest for each set of skills that assesses specific areas of strength and weakness. Based on the assessment results, the student receives a personalized learning plan, providing the most efficient and effective preparation possible.

VIRTUAL TUTOR: ACT WORKKEYS

This course prepares students for the WorkKeys assessments in Applied Math, Graphic Literacy, and Workplace Documents. Each unit of instruction includes teacher-led video instruction with teachers modeling assessment items comparable to the ones students will encounter on exam day. In addition, students have ample practice opportunities, as each lesson includes multiple assignments, with each one aligned to the difficulty and cognitive processes demanded by one of the five levels of mastery on the WorkKeys assessment.

VIRTUAL TUTOR: ASVAB

This course prepares students for the Math, Verbal, and Science sections of the Armed Services Vocational Aptitude Battery. Each subject includes multiple strands, each with its own diagnostic pretest—allowing students to focus their study only on their areas of weakness. Personalized study plans based on the diagnostic results include video-based instruction, assignments and practice, and assessment to ensure that students have mastered material.

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NORTHGATE ONLINE LEARNING ACADEMY ENROLLMENT VERIFICATION

By signing below, each party agrees to abide by the policies and procedures of the Northgate Online Learning Academy as set forth by this document.

Parent Name: _____

Parent/Guardian Signature: _____

Date: _____

Student Name: _____

Student Signature: _____

Date: _____

District Administrator Name: _____

District Administrator Signature: _____

Date: _____

NORTHGATE ONLINE LEARNING ACADEMY EQUIPMENT AGREEMENT

Equipment Issued to Student:

Computer Model: _____ Serial Number: _____

Date Issued: _____ Date Returned: _____

Charger: Yes No

If Northgate School District computer equipment is not returned or returned to the District damaged, the student will be responsible for replacement of damaged equipment at the following rate:

- Laptop \$350.00

- Laptop Charger and Power Cord \$30.00

I, parent or guardian of _____, understand that the equipment listed above is the property of Northgate School District. I understand that the equipment listed above is to be returned in good working condition to Northgate School District upon completion of my enrollment with the Northgate Online Learning Academy.

Parent/Guardian Signature: _____ Date: _____