

NORTHERN POTTER JUNIOR-SENIOR HIGH SCHOOL



www.northernpottersd.org

Course Selection Guide

2023-2024

GRADUATION REQUIREMENTS

The Northern Potter School District Board of Education requires that each candidate for graduation shall:

1. Demonstrate proficiency in each of the state standards not assessed by a state assessment.
2. Have completed courses and earned passing grades resulting in a minimum of twenty-six (26) credits.

COURSE REQUIREMENTS

Department	Courses	Credit Requirements
English	4 Courses	4 Credits
Social Studies	4 Courses	4 Credits
Science	4 or 3 Courses	4 or 3 Credits
Math	4 or 3 Courses	4 or 3 Credits
Physical Education	4 Courses	2 Credits - 1, .5 credit course per year
Health	2 Courses	1 Credit - 2, .5 credit courses over 4 years
Electives		5 Credits

Students enrolled at the Career and Technical Center will have their Math and Science credit requirement reduced from 4 or 3 to 3 and 2.

COURSE PROGRESSION

Subject	Year 1	Year 2	Year 3	Year 4
English	English 9	English 10	English 11	English 12
Social Studies	US History 9	History 10	World Cultures	Contemp Am. Hist. and Politics
Science	Biology	Physical Science 1 Chemistry	Physical Science 2 Physics	Advanced Biology Anatomy/Physiology
Math	Pre-Algebra Algebra 1 Geometry	Algebra 1 Geometry Algebra 2	Geometry Algebra 2 Pre-Calculus	Algebra 2 Pre-Calculus Calculus Business Math
Physical Education	PE	PE	PE	PE
Health	Jr. Health		Sr. Health	

3. Have met the requirements prescribed by the Commonwealth of Pennsylvania including those for Keystone Testing if applicable.

Pennsylvania Statewide Graduation Requirements

Formerly, Pennsylvania's statewide graduation requirement was more restrictive, requiring most students to pass the Keystone Exams - end of course exams in Algebra I, Literature, and Biology. The new statewide graduation requirement takes effect starting with the graduating class of 2023 (Act 158/Act 6) and establishes five pathways for students to demonstrate college, career, and community readiness.

Students in the class of 2023 forward can meet the statewide graduation requirement within the Northern Potter School District through one of the following pathways:

(1) Keystone Proficiency Pathway: Scoring proficient or advanced on each of the Keystone Exams - Algebra I, Literature, and Biology.

(2) Keystone Composite Pathway: Earning a satisfactory composite score (4452) on the Algebra I, Literature, and Biology (while achieving at least a score of proficient on at least one of the three exams AND no less than a score of basic on the remaining two exams).

(3) Alternative Assessment Pathway: Earning a passing grade in the courses associated with each of the Keystone Exams on which a score of proficiency was not achieved AND satisfactorily completing one of the following:

- Attainment of an established established score on one of the following approved alternative assessment: SAT (Score of 1010); PSAT (Score of 970); ACT (Score of 21); ASVAB (the minimum score needed to gain admittance to a branch of the armed services in the year the student graduates);
- Attainment of Gold Level on the ACT WorkKeys Assessment;
- Attainment of a 3 or higher on an Advanced Placement test in the content area associated with each Keystone Exam in which a score of proficiency was not achieved;
- Successful completion of a concurrent enrollment course in the content area associated with each Keystone Exam in which a score of proficiency was not achieved.
- Successful completion of a pre-apprenticeship program;
- Acceptance in an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in college-level coursework. (i.e. letter of acceptance, placement test results, college registration form, etc.)

(4) Evidence Based Pathway: Earning a passing grade in the courses associated with each of the Keystone Exams on which a score of proficiency was not achieved AND demonstrating three pieces of evidence consistent with goals and career plans.

Including one of the following pieces of evidence:

- Attainment of Silver Level on the ACT WorkKeys Assessment;
- Attainment of a 630 on an SAT Subject Test;
- Attainment of a 3 on an Advanced Placement test;
- Acceptance to an accredited nonprofit institution of higher education other than a 4-year institution and evidence of the ability to enroll in college level coursework; (i.e. letter of acceptance, placement test results, college registration form, etc.)
- Attainment of an industry-recognized credential;
- Successful completion of a concurrent enrollment or postsecondary course.

Including two of the following pieces of evidence:

- Satisfactory completion of a service learning project. Project proposals must be presented in writing to a guidance counselor for pre-approval by the principal/assistant principal. The proposal should include goals, activities, and contributions to the community. Projects must be supervised by an adult and completion must be verified in writing. (i.e. National Honors Society, Junior Rotarians, Boy Scouts, etc.);
- Attainment of proficiency or advanced on a Keystone Exam
- A letter from an employer guaranteeing full-time employment;
- A certificate of successful completion of an internship or cooperative education program;
- Satisfactory compliance with the NCAA's core course for college-bound student athletes with a minimum grade point average (GPA) of 2.0.

(5) Career and Technical Education Pathway: Earning a passing grade in the courses associated with each of the Keystone Exams on which a score of proficiency was not achieved AND one of the following:

- Obtaining an industry-based competency certification related to the Career and Technical Education (CTE) Concentrator's program of study.
- Demonstrating a high likelihood of success on an approved industry-based competency assessment. (National Occupational Competency Testing Institute (NOCTI) or the National Institute of Metalworking Skills (NIMS)

4. Complete a graduation project consisting of forty (40) hours of community service and a final oral presentation based on the community service experience. Students may begin working on the community service hour requirement prior to grade 9.

COURSE DESCRIPTIONS

LANGUAGE ARTS:

English Language Arts 7

2 Semesters

This required course for students in Grade 7 emphasizes working towards mastery of the reading, writing, speaking, and listening standards. Students will learn the elements of fiction, nonfiction, poetry, and drama and will practice writing informative, argumentative, and narrative essays. Students will also improve writing skills through grammar study and practice.

Reading and Writing 7

2 Semesters

This course content continues to emphasize mastery of the ELA 7 standards. There is a special emphasis on the “Power Standards” that are the largest focus on the PSSA testing. The main areas of study will include reading comprehension strategies, word parts, text dependent analysis, test-taking strategies, and writing strategies. Students will also work on a research project and speaking and listening skills.

English Language Arts 8

2 Semesters

This required course for students in Grade 8 will continue working towards mastery of the reading, writing, speaking, and listening standards through study of fiction, nonfiction, poetry, and drama, and practice of informative, argumentative, and narrative essays. Emphasis will also be placed on improving skills in grammar by studying sentence types and errors.

Reading and Writing 8

2 Semesters

This course content continues to emphasize mastery of the ELA 8 standards. There is a special emphasis on the “Power Standards” that are the largest focus on the PSSA testing. The main areas of study will include reading comprehension strategies, word parts, text dependent analysis, and writing strategies.

English 9

2 Semesters

1 Credit

This required course for all 9th Grade students utilizes a core literature program to guide students in the development of reading, writing, speaking, and listening skills. It introduces a survey of topics that will be further studied in English 10 including types and elements of fiction and nonfiction, literary analysis, comprehension, critical thinking, vocabulary acquisition, writing for different purposes, MLA formatting, and effective discussion and presentation techniques.

English 10

2 Semesters

1 Credit

English 10 utilizes a core literature program along with a broad range of different types of text to guide students in the development of reading, writing and speaking skills necessary to achieve proficiency on the Keystone Exam for Literature. The course focuses on skills for reading comprehension, critical thinking, vocabulary/vocabulary in context, writing for formal and informal purposes, verbal communication and research. Students complete interest and skills surveys and conduct preliminary research into multiple potential career paths to produce a short term (one year) plan.

English 11

2 Semesters

1 Credit

English 11 focuses on reading and writing across a wide variety of texts as well as speaking in both formal and informal situations. The course focuses on developing skills in critical thinking and analysis of multimedia sources, overall comprehension, vocabulary/vocabulary in context, writing for multiple purposes and audiences, and research. Students also continue to explore career paths, developing a career plan, resume, and cover letter for their career portfolio.

English 12

2 Semesters

1 Credit

English 12 is a required course for all seniors and comprises an in-depth study of British literature, highlighting major writers of the periods and covering many genres. Students will also be responsible for completing a variety of writing, reading, and speaking assignments geared toward college/work environment(s). Topics and activities include vocabulary work, writing, speeches, and reading (independent and group).

*Literature and Interpretation

2 Semesters

1 Credit

Literature and Interpretation will examine the ways in which meaning is created in both literary and non-literary texts and introduce students to some of the methods of literary interpretation. The class will examine common literary devices and literary concepts like genre, narrative, character, and figurative language and use these concepts to consider the interaction among the reader, the writer, and the text itself and between different texts in the act of interpretation. A college-level textbook is used. Course is recommended for the junior year.

*Freshman Composition

2 Semesters

1 Credit

English Composition I focuses on the writing process and kinds of writing common in academic disciplines. The course is structured to aid students in the development of analytical reading, critical thinking, and expository writing skills. College level textbook is used. Course is recommended for the senior year.

Creative Writing

1 Semester

.5 Credit

This course is to introduce students to the basic skills of creative writing by exploring different approaches, techniques and genres. It is for students with a little basic experience writing creatively, but who want to learn and improve fundamental skills and find their future writing direction. The curriculum includes activities that will encourage students to establish and develop fundamental skills in creative writing using both informal writing (journaling) and formal writing/publishing (projects).

Shakespeare

1 Semester

.5 Credit

Shakespeare is a one semester course which covers various comedies and tragedies (often *Hamlet*, *Othello*, *The Merchant of Venice*, and *A Midsummer Night's Dream*.) Sonnet study may also be included. This course uses text and video to explore Shakespeare's work.

Greek Mythology

1 Semester

.5 Credit

This one-semester course is designed as an introduction to the Greek mythologies, and is offered as an elective to students in grades 9 and 10. It provides a close examination of myths, why cultures create them, and how a mythology reflects the culture of the people. The class concerns itself with the Greek God structures, stories, and ideas expressed in these mythologies. Common motifs and themes that serve as building blocks to the chronological study of literature are referenced, and allusions are studied. The course provides students the opportunity to not only broaden their Greek cultural knowledge, but also gives them insight and understanding of our own cultural attitudes and values today.

MODERN FOREIGN LANGUAGE:

Spanish 7 Rotation

.5 Semester

This course is designed to develop listening, speaking, writing, and reading skills in Spanish as well as cultural competency in the Hispanic world. This course is intended for students with no prior knowledge of Spanish. Students will be introduced to Spanish pronouns, the calendar, introductions and goodbyes. Students will also investigate specific topics related to cultural experiences.

Spanish 8 Rotation

.5 Semester

Students begin their introduction to Spanish by focusing on the four key areas of foreign language study: listening, speaking, reading, and writing. Each unit consists of a new vocabulary theme and grammar concept, reading and listening comprehension activities, speaking and writing activities, multimedia cultural presentations, and interactive activities and practices which reinforce vocabulary and grammar. Students will work on AR verb conjugation, time, classroom/school vocabulary and weather.

Spanish I

2 Semesters

1 Credit

This course provides an introduction to the language and culture of the Spanish speaking world. Students will be taught and evaluated in the areas of reading, writing, speaking, listening, and culture. Basic vocabulary and grammar structures are presented for "survival" in a foreign country. Students will be able to ask and answer simple questions in Spanish.

Spanish II

2 Semesters

1 Credit

This course continues and builds on the material learned in Level I Spanish. Students will begin to communicate using more complex grammatical structures. Aspects of Hispanic culture are presented and compared with those in the United States.

Spanish III

2 Semesters

1 Credit

Students will continue to build their mastery of the Spanish language by expanding on vocabulary and grammar topics. Students will begin to read and analyze short stories in Spanish.

Spanish IV

2 Semesters

1 Credit

Students will study literature written in Spanish, including short stories, novels, excerpts from novels, and poetry. The study of literature will be presented with a background in the history, culture, and geography on which the work is based.

SOCIAL STUDIES

Geography 7

2 Semesters

This required course in general geography features the study of geographical formation, cultural traits, and industries of the world's regions. In addition, students study weather and climate, map reading, and forces which shape the earth.

History 8

2 Semesters

This required course for students in Grade 9 is a history of the United States from the colonization period to the resolution of the Civil War. Political history and geography are studied with emphasis on the following topics: the exploration period, the French & Indian Wars, the Revolutionary War, the emergence of the Constitution and Bill of Rights, westward expansion, evolution of political parties, and the Civil War. In addition, current events are studied in the light of the United States' early development.

World Cultures 9

2 Semesters

1 Credit

The cultures of the ancient world provide models for legal, social, political, and cultural ideas for the world today. This course gives students a fascinating glimpse into the ancient world's most significant moments to discover how the individuals and groups have had a lasting impact today. The course encompasses the first civilization, Mesopotamia; the Egyptians; the early dynasties of China; Classical Greece; the Romans; the many peoples of the Middle Ages and Renaissance; feudal Japan; and many others.

U.S. History 10

2 Semesters

1 Credit

This required course for students in Grade 10 completes the two year curriculum in the history of the United States. The study of the political and geographical development of the United States continues, beginning at the end of the Civil War period and concluding with events in modern U.S. history. Points of emphasis include the Reconstruction Era, the development of the frontier and its effect on American history, the age of enterprise, the 1890's, WWI, the Roaring Twenties, the Great Depression, WWII, the Cold War, and the role of the U.S. in the changing modern world.

Modern World History

2 Semesters

1 Credit

The main focus is to study world history and global issues from Absolutism through the 20th Century. In class, students will examine the historical and cultural developments that have and continue to shape the world we live in. As students study these historic eras they will consider the influence of geographic location, cultural perspective, economic systems, and the various forms of government. To learn about the history of the modern world, students will be studying the lives and works of individuals that range from Napoleon Bonaparte to Mikhail Gorbachev, and important events that span from the French Revolution to the fall of Communism.

American Government and Economics 12

2 Semesters

1 Credit

The course is designed to study the style of democracy as practiced in the United States and to introduce students to the economic concepts of the world around them. The structure and function of the government is a focus of the course; and students learn how government in the United States has changed and evolved over time. The American system is compared to other democracies and other forms of non-participatory government. The problems posed by the American system are studied and students are encouraged to develop critical thinking skills including analysis and evaluation.

Introduction to Economics

1 Semester

.5 Credit

This course is a requirement for students in Grade 10. The course is designed to introduce students to the economic concepts of the world around them. Topics such as economic systems, needs vs. wants, supply, demand, and pricing, market structures such as monopoly and oligopoly, economic challenges, and government's role in the economy will be explored. Additionally, students will fictitiously invest in the stock market and track their investments while learning about the stock market.

The Modern World

2 Semesters

1 Credit

This elective course is available to students in grades 9-12. The main focus is to study world history and global issues from Absolutism through the 20th Century. In class, students will examine the historical and cultural developments that have and continue to shape the world we live in. As students study these historic eras they will consider the influence of geographic location, cultural perspective, economic systems, and the various forms of government. To learn about the history of the modern world, students will be studying the lives and works of individuals that range from Napoleon Bonaparte to Mikhail Gorbachev, and important events that span from the French Revolution to the fall of Communism.

Psychology

2 Semesters

1 Credit

This elective course is available to students in grades 9-12. It is designed to be an introductory course in psychology, exploring the basic issues, concepts, theories, and methods. The course is based on the pillars of psychology presented by the American Psychological Association. Topics including careers in psychology, personality, biological bases of behavior, memory, learning, motivation, and the history of human behavior will be discussed.

Human Rights Studies

2 Semesters

1 Credit

This elective course emphasizes the study of human rights and genocide. It is firmly anchored in the idea that teaching about human rights will be our best hope that humankind has to prevent genocide, torture, persecution, and other assaults upon human dignity and rights.

MATHEMATICS

Math 7

2 Semesters

This course will study many topics such as ratios and proportions, rational numbers, expressions and equations, geometry, statistics and probability. This course emphasizes a balance between mathematical procedures and conceptual understanding in the area of pre-algebra. The foundation of this course will be aligned with the PA Core Standards for 7th grade mathematics.

Math 8

2 Semesters

This course will study many topics such as the number system, expressions and equations, functions, geometry, statistics and probability. This course emphasizes a balance between mathematical procedures and conceptual understanding in the area of pre-algebra and algebra 1. Students will learn the important mathematics concepts and skills necessary to prepare them for PSSA and/or Keystone exams, higher level math courses, and real-world applications.

Pre-Algebra

2 Semesters

1 Credit

This class will review the basic operations of arithmetic on whole numbers, fractions and decimals. These operations will be used in dealing with ratio, proportions, percent, simple geometry and algebra. As students master these basic concepts, they will move into basic algebra. Students will be expected to understand basic operations with integers, rational numbers, irrational, and real numbers; the use of variables; properties of numbers and of equality; solving equations and inequalities; problem solving; relations and functions; and polynomials.

Algebra I

2 Semesters

1 Credit

The beginning course in algebra is designed for students in Grades 8 through 12 who have good mathematics aptitude and a desire to begin the study of mathematics at a level higher than basic arithmetic. Students should have a mastery of integer math and students in Grades 8 through 10 should have successfully completed the pre-algebra course or secure a recommendation from their most recent math teacher.

*Algebra II

2 Semesters

1 Credit

This course is available to students in Grades 9 through 12 who have successfully completed Algebra I and Geometry. The coursework covers several topics including: linear equations and inequalities, polynomials and problem solving, factoring and special products, rational expressions, radicals and rational number exponents, quadratic equations, complex numbers, coordinate geometry, linear systems, matrices and determinants, and functions. Additional topics may be added if time permits.

Geometry 2 Semesters 1 Credit
The elective course in Geometry is open to any senior high school student who has successfully completed Algebra I. The focus of the course is to develop deductive reasoning skills through the study of plane and solid geometry. There is heavy emphasis on practical applications of geometric principles. The utilization of definitions, theorems, corollaries, and postulates will be an important part of the problem solving process.

*PreCalculus 2 Semesters 1 Credit
This course is an advanced elective mathematics course for students in grades 11 and 12 who have successfully completed Geometry and Algebra 2. Topics include functions and their graphs, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions and identities, systems of equations and inequalities, matrices and determinants, series, sequences and probability, conic sections, and vectors. This course places heavy emphasis on the use of graphing utilities.

*Calculus 2 Semesters 1 Credit
This is the first course in the Calculus sequence, and is intended for all mathematics, engineering, and science students. We will study limits, continuity, differentiation and integrations of real-valued functions in one real variable.

Probability and Statistics 2 Semesters 1 Credit
This elective is open to Grades 11 and 12. A prerequisite is having successfully completed Algebra II with an 85% or higher. Instructor permission is required for students under an 85%. This course will examine qualitative and quantitative research methodologies. Students will choose a research topic, complete a review of related literature, and collect data. Students will also utilize statistical analysis to prove or disprove hypotheses, examine similar and different data sets, and identify this data for trends and tendencies. Project work will include collection of real data, and students will learn to draw conclusions from that data.

Personal Finance 1 Semester .5 Credit
Personal Finance is an examination of ways for students to earn, save, and distribute wages. Topics will include but not limited to: gross and net wages, checking and savings accounts, IRA's, mutual funds, the stock market, creating a budget, buying and financing a car, house, apartment, building and paying off credit, and insurance options.

Technical Math 1 2 Semesters 1 Credit
Technical Math is designed to develop students' mathematical ability, by focusing on math skills that apply in today's work environment. Practical math skills are emphasized, as well as their connection to real world application. Technical Math is an excellent course for students to increase their math skills, and provides students an excellent opportunity to prepare for college math courses. Technical Mathematics 1 will focus on basic concepts of numbers, measurement, customary and metric measure with precision, accuracy, and tolerance. Fundamentals of Algebra will be studied and applied to practical situations in industry and trades.

Technical Math 2

2 Semesters

1 Credit

Technical Math is designed to develop students' mathematical ability, by focusing on math skills that apply in today's work environment. Practical math skills are emphasized, as well as their connection to real world application. Technical Math is an excellent course for students to increase their math skills, and provides students an excellent opportunity to prepare for college math courses. Technical Math 2 applies concepts of geometry and advanced algebra to industry and trade applications. Basic Statistics will be introduced as time permits.

Business Math

2 Semesters

1 Credit

This course is designed for 12th grade students who are looking to expand their real-world knowledge of business topics. The course depends heavily on the utilization of correct terminology and is based on mathematical applications. Topics include, but are not limited to, the study of salary and fringe benefits, budgeting, personal and small business finance, banking, insurance, buying and owning a home or vehicle. Spreadsheet applications will be studied as computer lab availability and time permit. A student may not receive credit for both Business Math and Consumer Math.

SCIENCE:

Science 7

2 Semesters

This required course provides 7th grade students with a survey of the life sciences. Topics include studies of the plant and animal kingdoms, heredity and adaptation, anatomy and human biology.

Science 8

2 Semesters

This required course provides 8th grade students with a survey of the earth and space sciences. Topics include elementary astronomy, the composition and structure of the earth, geological history of the earth, and current topics in Earth Science.

Biology

2 Semesters

1 Credit

This required 9th grade laboratory-oriented course provides the student with an introduction to biological concepts, classification and structure, and a survey of biological interrelationships. Preserved and living specimens are studied using a variety of laboratory techniques including microscopic studies, some dissection, and the use of models.

*Advanced Biology

2 Semesters

1 Credit

This elective is available to students who have successfully completed Biology Course with a minimum grade of 85%. In addition, the student should have successfully completed either Chemistry or Physical Science I. The cellular foundation of life, cell division and genetics, Evolution and the Diversity of Life, Animal Structure and Function, Ecology, and dissection are presented for all students. Students are responsible for solving case studies, leading discussions, and generating lab activities along with lab protocols and formal reports. Senior standing and a credit in either Chemistry or Physical Science I is required.

*Anatomy and Physiology

2 Semesters

1 Credit

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics covered will include body planes, body organization, homeostasis, integumentary, skeletal, muscular, nervous systems and special senses. Students will gain an in-depth understanding of principles of anatomy and physiology and their interrelationships. Dissection, microscope study, research, and presentations of material are also completed in this class.

*Chemistry

2 Semesters

1.4 Credits

This is a college elective course for students that have successfully completed Algebra I. The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements. It is broken up into 4 units to provide a student with a solid foundation of chemistry.

Physical Science I

2 Semesters

1 Credit

Physical Science I is a lab oriented general science elective for students in Grades 10 through 12 dealing with chemistry and matter. To identify and explain the basic concepts and theories of chemistry. To demonstrate a disciplined approach to problem solving in chemistry. To develop skills in teamwork in designing experimental strategies to collect data through proper measurements. To report and interpret data from the laboratory projects in a meaningful manner.

Physical Science II

2 Semesters

1 Credit

This elective course for Grades 10 through 12 is concerned with energy and matter. Physical Science II presents a practical approach to the study of motion, magnetism, electricity, gravitation, and elementary thermodynamics; and features many laboratory experiences to relate physical science to everyday phenomena.

*Physics

2 Semesters

1.4 Credits

Physics is a college course which focuses on the dynamic relationships between matter and energy. 2 extra periods per week are provided for extended laboratory experience and heavy emphasis is placed on theoretical models. Algebra II may have been completed or it may be taken concurrently. Topics cover angular and rectilinear motion including velocity and acceleration, thermodynamics, forces, the wave properties of sound and light, and electricity and magnetism.

Survival Science

2 Semesters

1 Credit

This is a course that includes elements of biology, chemistry, physics, and home economics. Topics covered include outdoor survival, food preparation, and do-it-yourself methods vs commercial.

Forensic Science

2 Semesters

1 Credit

This is a laboratory-based course in which students apply their prior scientific and mathematical knowledge to the fundamentals of crime scene investigation. The course includes the study of arson, ballistics, blood samples, blood spatters, drugs, poisons, and trace evidence analysis. Students are taught the proper collection, preservation, and laboratory analysis through various methods. Historical crimes, cold cases, and recent crimes will be analyzed and evaluated through verbal discussions, written reports, and opinion-based essays. This elective is available to students who have successfully completed the Biology course with a minimum grade of 85%. In addition, students should have successfully completed either Chemistry or Physical Science I and have a strong understanding of mathematical concepts.

BUSINESS

Introduction To Business

2 Semesters

1 Credit

This course is designed as an elective for students in grades 9-12. It introduces them to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and global level. The course covers business management, entrepreneurship, marketing fundamentals, business ethics and law, consumer roles, and financial responsibilities. Students in the course participate as the ‘Sharks’ for the Middle School Innovation Challenge project.

Accounting I

2 Semesters

1 Credit

This elective for students in Grades 10, 11, and 12 is an introductory course in the theory and practice of accounting. It provides students with the basic knowledge of accounting procedures, including analyzing and journalizing business transactions; constructing worksheets; calculating and recording adjusting entries; preparing financial statements; and finalizing the accounting cycle through closing entries. Special journals, subsidiary accounts and payroll reports and taxes will also be introduced. All students, regardless of the career they choose, can benefit from accounting instruction in their own personal business affairs.

Multimedia Design & Marketing

2 Semesters

1 Credit

Multimedia Design & Marketing (MDM) is an elective, extracurricular course that gives students marketable experience in print media publishing and marketing. This course provides students with an introduction to the world of marketing and real-world application connections. Topics include analysis of markets and customer value, marketing research, consumer behavior and developing marketing decisions, pricing, channels of distribution and promotion. However, the main focus is working toward the completion and selling of a large finished product- Northern Potter’s Yearbook: Northern Lights. In addition, students will put together and publish the weekly NOPO News hallway slideshow.

Futures 7

1 Semester

A requirement for all 7th grade students, this course is an introductory career development course designed to help students understand their interests, skills, and values and how they relate to their career exploration. Students will be exposed to various career pathways and other opportunities in the world of work. Information obtained from this class will help guide the student in selecting their career pathway.

Futures 8

1 Semester

A requirement for all 8th grade students, this course is a continuation of Futures 7. Students will explore resources to determine their personality type and connect it to a post-secondary opportunity. Students explore where to find jobs, how to complete job applications, how to prepare resumes and all the skills necessary to participate in a successful interview. With this information, students will generate an Individual Academic and Career Plan (IACP) that will guide them through grades nine through 12.

Career Pathways

1 Semester

.5 Credit

This course is a half-year, required course for all ninth graders. The goal of this course is for students to gain the necessary information, insight, and skills needed to be successful here at Northern Potter and in life after high school. The course will focus on the following topics: digital skills using individual career applications, skills to pay the bills (employability skills), personal finance, digital citizenship and entrepreneurship. By the end of the course, students will have numerous pieces of evidence for their required career portfolios.

HEALTH AND PHYSICAL EDUCATION

Jr. Health

1 Semester

.5 Credit

This required course for students in Grade 9 provides instruction in the following areas: body systems, growth and development, personal care, health consumer awareness, nutrition, fitness, and substance abuse. The principal focus of the course is to instill a high awareness of health issues and to provide sufficient information for the student to develop a healthy lifestyle.

Sr. Health

1 Semester

.5 Credit

This required course for students in Grade 11 provides a general survey of health and seeks to promote physical and mental well-being through the study of topics such as: anatomy, physiology, organic and functional disease, disease prevention, mental attitudes, and substance abuse.

Physical Education 7/8

1 Semester

.5 Credit

This required course for students in Grades 7 and 8 provides instruction in basic movement skills and common skills associated with playing team sports. Conditioning and goal setting for lifelong fitness. Drills are emphasized to increase fitness and to strengthen fundamentals in order to develop more complex movement skills. Activities include: soccer, basketball, fitness and games, hockey, softball, and volleyball, cross country skiing and rollerblading.

Physical Education 9/10

1 Semester

.5 Credit

Conditioning activities to develop and strengthen lifelong fitness. This course for students in Grades 9 and 10 is designed to provide a foundation for the development of skills, knowledge of a variety of activities including , soccer, basketball, volleyball, scooter games, fitness games, softball, hockey, cross country skiing, rollerblading, and weight room unit.

Physical Education 11/12

1 Semester

.5 Credit

Addressing the importance of lifelong fitness, conditioning and goal setting. This course for students in Grades 11 and 12 is designed to provide a foundation for the development of skills, knowledge and appreciation of a variety of activities including table tennis, soccer, basketball, volleyball, scooter games, fitness games, softball, hockey, cross country skiing, rollerblading and weight room workouts. . The benefits and techniques of lifelong fitness are also discussed and demonstrated.

VISUAL AND PERFORMING ARTS

Art Survey I

1 Semester

.5 Credit

Students will be provided practical and theoretical knowledge of the visual arts. Many disciplines of art, such as drawing, painting, graphic design, sculpture, and printmaking will be touched upon.

Art Survey II

1 Semester

.5 Credit

This course is a continuation of Art Survey 1. Although the disciplines are the same, students are provided a deeper understanding of each area. They are also encouraged to identify a specific area of interest that will, hopefully, lead to continued participation in other art classes.

Art Studio

1 Semester

.5 Credit

This course is designed for the advanced art student who is progressing in an individual direction by building a personal portfolio.

Ceramics I

1 Semester

.5 Credit

This course is designed to introduce the beginning student to the design and production of both wheel and hand-formed ceramics.

Drawing I

1 Semester

.5 Credit

This course is designed to introduce the beginning student to a variety of drawing media and techniques. The primary emphasis is on the development of perception, composition, perspective, light, and shade.

Drawing II

1 Semester

.5 Credit

A prerequisite for this course is Drawing I. The course is a continuation of Drawing I. The student is encouraged to develop an individual direction through imagination, personal experimentation, and observation.

Painting I

1 Semester

.5 Credit

This is a beginning course in fundamental concepts and competencies in painting both watercolor and acrylic media.

Painting II 1 Semester .5 Credit

A prerequisite is Painting I. This course is designed to allow students to extend their understanding of the fundamental concepts and competencies of painting. The student is encouraged to develop an individual direction through imagination, personal experimentation, and observation.

Middle School Chorus 2 Semesters

Rehearsal and performance of choral repertoire appropriate to mixed voices.

High School Chorus 2 Semesters .5 Credit

Rehearsal and performance of choral repertoire appropriate to mixed voices.

Middle School Band 2 Semesters

Rehearsal and performance of concert band literature.

High School Band 2 Semesters .5 Credit

Rehearsal and performance of concert band literature. Prerequisite: permission of instructor.

Music 7 .5 Semester

Mandatory course for all 7th grade students. This course will teach the basics of music theory, including rhythm, note reading, melody and harmony, composition, music history, and appreciation. The guitar will be the fundamental tool for learning these concepts.

Music 8 .5 Semester

Mandatory course for all 8th grade students. This course will teach the basics of music theory, including rhythm, note reading, melody and harmony, composition, music history, and appreciation. The guitar will be the fundamental tool for learning these concepts.

Modern Band 2 Semesters 1 Credit

Students will learn the fundamentals of playing the basic instruments of a rock band. These will include guitar, keyboard, bass, and drums. The goal is to be able to play simple rock tunes as an ensemble.

AGRICULTURE EDUCATION:

Wildlife, Conservation, and Natural Resources 2 Semesters 1 Credit

This is an advanced level course that covers the hands-on portions of biology and the environment. Students will go over land uses and management as well as land judging for Ag purposes. Forest ecology and dendrology will be covered as well as maple production. Students will review the water cycle and do an extensive aquatics unit. They will also have the opportunity to study our natural resources and go over outdoor recreation with a focus on safety and parks. They will also take an in depth look at PA wildlife and better understand the PA Game Commission job and hunting regulations.

Forestry

2 Semesters

1 Credit

This is an advanced level course that takes an in-depth look at Forestry and its Industry. The history of PA Forests will be gone over and Forest ecology and dendrology will be covered extensively. Students will participate in an advanced unit of maple production. Students will also get a chance to learn about silviculture, urban forestry, harvesting, and Timbersports. They will also have the opportunity to study our natural resources and review outdoor recreation. They will focus on forestry careers and they will also take an in depth look at DCNR and better understand their job and forest conservation.

Animal Anatomy

2 Semesters

1 Credit

In this course the students will take their animal knowledge from Introduction to Agriculture to apply it to this course. This class will dive deeper into the anatomical parts of agricultural animals including but not limited to the different bodily functions and systems. As well as animal health in order to prepare the students for their next course in this track.

Introduction to Agriculture

2 Semesters

1 Credit

This is an introductory course that is taken mainly by 9th grade students. In this class students will explore the main domains of agriculture being plant and animal systems. As well as desired hands-on activities relating to those branches of agriculture. Students will explore personal growth, premier leadership, and career success through the FFA.

Agribusiness and Lifestyle

2 Semesters

1 Credit

This is an elective course that explores the business sides of agriculture. The students will be introduced to the financial aspects, the decision making, and the various opportunities that come along with agribusiness. There will be lifestyle aspects implemented, which are included but not limited to canning foods, changing a tire, sewing and stitching, and more.

Animal Systems

2 Semesters

1 Credit

Students will cover everything from the history of animal science to the production of food animals in today's world. Students will learn about animal processing, farming techniques, how to set up barns, how to handle and care for animals, as well as breed identification, and new technology in livestock production. They will also cover information on companion animals, they will learn about basic vet science skills, and be able to get some hands-on work with many of the livestock animals discussed.

Plant Systems

2 Semesters

1 Credit

Plant science covers the classification of plants and plant anatomy. Students will have the opportunity to work in the greenhouse and on landscaping around the school. They will cover soils, propagation, germination, floral design, environmental growth factors, greenhouse design, landscaping basics, and pesticides. They will also learn about crops and growing techniques.

Environmental Studies/Science

2 Semesters

1 Credit

This course is an entry level course that is offered to students from 9th to 12th grade, and covers the basic information about the aspects of the environment. Students will be engaged in the usages and opportunities that the surrounding environments offer. This includes our available natural resources and natural energy sources, such as hydropower, solar power, and wind power. Along with lessons on what sustainability is and different practices, as well as touching on conservation

Woodworking

2 Semesters

1 Credit

These students will review the basic shop safety, first aid, and hand tools, they will also continue with AET record keeping. They will advance their understanding of tools and safety in the Ag shop and expand on their knowledge and understanding with woodworking tools and materials. They will complete an intermediate wood project showing their knowledge with basic wood tools and materials. They will work through troubleshooting any issues that may arise with necessary skills learned and utilized in the classroom/shop

Leadership

2 Semesters

1 Credit

This course will allow students to explore and expand their knowledge in understanding the intra-curricular connection between FFA and Agriculture Education. As well as be able to recognize the role that FFA plays in personal and professional development. They will be able to demonstrate the use of Parliamentary Procedure, identify the key factors in working with teams and one another, and develop and implement an annual program of activities for the FFA chapters. These students will work closely with the FFA members and committees in event planning and participating with career development events. They will continue to maintain their SAE record books in a timely manner.

Agriculture Mechanics I

1 Semester

.5 Credit

These students will begin with basic shop safety and first aid and learn about tools and record keeping. They will work in the shop and learn how to properly use the plasma cutter and arc welders. They will complete a stick welding sheet with basic stick weld joints. They will go over basic small gas engine tools as well as internal and external engine parts.

Agriculture Mechanics I Advanced

1 Semester

.5 Credit

These students will review the basic shop safety, first aid, and hand tools, they will also continue with AET record keeping. They will advance their understanding of tools and safety in the Ag shop and expand on their knowledge and understanding of the plasma cutter and arc welders. They will complete an advanced stick welding sheet that introduces new electrodes and weld joints. They will review the basic small gas engine tools and parts and advance their knowledge to engine systems and troubleshooting basics.

Agriculture Mechanics II

1 Semester

.5 Credit

This course is for second year Ag mechanics students, students must have taken Ag Mech. In order to be in this course, students will review and advance their knowledge of shop safety and advanced cutting techniques and arc welding work. They will be able to work with the MIG welders. They will go through advanced small gas engine breakdown and rebuilding. They will have the opportunity to work on advanced projects from outside of school in both the welding portion and the small gas engines portion.

Agriculture Mechanics II Advanced

1 Semester

.5 Credit

This course is for second round Ag mechanics II students. Students must have taken Ag Mech. II in order to be in this course. Students will have more technical cutting and torching projects and they will complete out of Position arc welding work. They will also be given the advanced MIG welding sheet. They will complete small gas engine maintenance and troubleshooting projects. They will have the opportunity to work on advanced projects from outside of school in both the welding portion and the small gas engines portion while completing client work papers.

Agriculture Mechanics III

1 Semester

.5 Credit

Students must have taken Ag Mech I and II in order to be in this course. These students will begin with basic shop safety review and learn about the TIG welding process. They will work in the shop and complete a weld sheet using the TIG welder. They will go over basic electrical skills that include electrical circuit boards. There will also be a tractor driving aspect of this course as well.

Agriculture Mechanics IV

1 Semester

.5 Credit

This course is for advanced Ag mechanics students, students must have taken Ag Mech. I, II, and III in order to be in this course. Students will review shop safety and complete a weld sheet to review MIG and TIG welding. They will learn how to read weld print and learn how to complete weld drawing. They will also go through advanced small gas engines materials working on building projects from the ground up. They will have the opportunity to work on projects from outside of school in both the welding portion and the small gas engines portion.

Veterinary Technology(Veterinary Science)

2 Semesters

1 Credit

This course is for advanced animal science students. Students must have taken animal science as a prerequisite. They will go through the advanced body systems of the different small animals and livestock species that are covered. They will study animal behaviors and learn both large and small animal vet science skills. Students will also cover biotechnology in today's agriculture and go through career preparation and a transition to animal science work fields.

Advanced Horticulture

2 Semesters

1 Credit

This course is for students that have completed the Plant Systems course as a prerequisite. This course will cover advanced landscaping techniques, plant ID and Landscape uses, GMO's, biotechnology advancements, and they will have the opportunity to learn about pesticide application and safety. They will also build scaled landscape projects from a landscape drawing.

Agriculture 7 Rotation

.5 Semesters

This course is set up for all 7th graders. This is a 9 week course. These students will have the opportunity to learn about the basic animal science terminology and parts of the livestock species covered. They will also learn about the reproduction information of those species. This course will also cover the basic plant science terminology, plant parts, and germination information. The last portion of this course will allow students to gain a basic understanding of Environmental science, Natural resources, and Ecosystems.

Agriculture 8 Rotation

.5 Semesters

This course is set up for all 8th graders. This is a 9 week course. These students will have the opportunity to learn about the history of The National FFA Organization, along with the basics of the Organization and the FFA Creed. They will also gain an understanding of agriculture mechanics shop safety and they will learn how to stick weld.

Supervised Agricultural Experience

.5, 1, or 2 Semesters

.25, .5, 1 credit

Supervised Agricultural Experience (SAE) students will have the opportunity to gain anything from ¼ credit to a full credit depending on the amount of completion to the online SAE record book. This course allows students to work with the instructor to set up an SAE project to gain real life experience with their job, entrepreneurship project, research, volunteer hours, and more. They will be required to complete the Agriculture Experience Tracker (AET) online. The amount completed within the AET will be the basis for the amount of credit received for the course. Their AET includes hands-on journal hours, budgeting, planning, and goal setting within their specific project.

Independent Agriculture

.5, 1, or 2 Semesters

.25, .5, 1 credit

This course requires students to be able to learn and work independently on projects related to the world of Agriculture. They have to set up their projects on their own and make sure they work within their current course schedule. There are some online options as well as additional projects that they can complete in the classroom, plant science area, or the ag shop.

*Calculus 2 Semesters 1 Credit

This is the first course in the Calculus sequence, and is intended for all mathematics, engineering, and science students. We will study limits, continuity, differentiation and integrations of real-valued functions in one real variable.

*Advanced Biology 2 Semesters 1 Credit

This elective is available to students who have successfully completed Biology Course with a minimum grade of 85%. In addition, the student should have successfully completed either Chemistry or Physical Science I. The cellular foundation of life, cell division and genetics, Evolution and the Diversity of Life, Animal Structure and Function, Ecology, and dissection are presented for all students. Students are responsible for solving case studies, leading discussions, and generating lab activities along with lab protocols and formal reports. Senior standing and a credit in either Chemistry or Physical Science I is required.

*Anatomy and Physiology 2 Semesters 1 Credit

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics covered will include body planes, body organization, homeostasis, integumentary, skeletal, muscular, nervous systems and special senses. Students will gain an in-depth understanding of principles of anatomy and physiology and their interrelationships. Dissection, microscope study, research, and presentations of material are also completed in this class.

*Chemistry 2 Semesters 1.4 Credits

This is a college elective course for students that have successfully completed Algebra I. The course emphasizes stoichiometry (chemical calculations), chemical equations, gas laws, elementary atomic structure and periodic properties of elements. It is broken up into 4 units to provide a student with a solid foundation of chemistry.

*Physics 2 Semesters 1.4 Credits

Physics is a college course which focuses on the dynamic relationships between matter and energy. 2 extra periods per week are provided for extended laboratory experience and heavy emphasis is placed on theoretical models. Algebra II may have been completed or it may be taken concurrently. Topics cover angular and rectilinear motion including velocity and acceleration, thermodynamics, forces, the wave properties of sound and light, and electricity and magnetism.

Seneca Highlands Career and Technical Center

219 Edison Bates Drive, Port Allegany, PA 16743

642-2573- Fax 642-5100 - shctc iu9ctc.or

<p>AUTOMOTIVE MECHANICS</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION PA State Inspection License</p>	<ul style="list-style-type: none"> -Service, repair, and maintain engines -Work on valve trains, suspension, brakes, and exhaust systems -Use current tools/equipment such as scanning tools and computerized front end aligner -Prepare for a career as a Front End Mechanic, Brake Repairer, Transmission Specialist or Automobile Mechanic -Students should have good mechanical problem solving and measurement skills and be willing to work in a sometimes dirty work environment 	<p>BUILDING CONSTRUCTION OCCUPATIONS</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATIONS ICC- International Code Council OSHA 10 +30</p>	<ul style="list-style-type: none"> -Build a residential house from the ground up -Interpret blue prints and specifications -Construct wood products and structures from rough lumber to finish grade -Operate a wide range of hand power tools, air tools, and machines -Prepare for a career as a Carpenter, Construction Carpenter, Construction Manager or Business Owner -Students should have good measurement skills, be able to work at heights up to 50 feet and be willing to work in inclement weather 										
<p>CULINARY ARTS</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION ServSafe Sanitation Certificate</p>	<ul style="list-style-type: none"> -Work side-by-side with professional chefs -Make gourmet foods with artistic presentation -Participate in catering projects and in the operation of a full- service restaurant -Prepare for a career as a Cook, Pastry Cook, Kitchen Helper or Waiter/maitress -Students must be willing to taste food, learn French cooking terminology, work in the public eye, and should have good measurement skills 	<p>EARLY CHILDHOOD EDUCATION</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION CDA</p>	<ul style="list-style-type: none"> -Early Childhood Education program is designed to teach students the aspects of teaching and working with young children. -Students will: explore career pathways and develop the characteristics of successful teachers/ childcare providers. -Apply theoretical concepts to real-life situations -Students will learn how to meet the developmental needs and interests of young children. 										
<p>HEALTH ASSISTANT</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION Nurse Aide</p>	<ul style="list-style-type: none"> -Work side-by-side with health care professionals -Learn medical terminology and anatomy -Practice hands-on care -Gain clinical experience at long-term care facilities -Prepare for a career as a Nurse Assistant or Medical Assistant -Students must have a good health record and be able to accept and carry out precise orders 	<p>HOMELAND SECURITY</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATIONS CPR Frist Aid AED EMT</p>	<p>Acquire skills from public safety areas of firefighting, law enforcement, and emergency services</p> <p>Receive instruction; participate in practical applications and situational learning experiences</p> <p>Prepare for national, state and local certifications in all three areas of public safety</p> <p>Refine personal career opportunities and choose personal career opportunities in an area of specialization of public safety</p>										
<p>WELDING TECHNOLOGY</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATIONS Tooling U/AWS OSHA 10 +30</p>	<ul style="list-style-type: none"> -Use MIG, TIG, stick, and oxyfuel welding -Perform oxyfuel and plasma cutting and air arc gouging -Learn to choose the best welding and cutting process for the job at hand -Prepare for a career as a Construction or Fabrication Welder -Students should have good measurement skills and be willing to work outside and to get dirty 	<p>ENGINEERING TECHNOLOGY</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION NIMS Certification Tooling U/AWS OSHA 10 +30</p>	<p>Use mills, CNC mills, and lathes</p> <p>-Learn to use precision measurement tools</p> <p>-Read blueprints or design parts and machine them to precise specifications</p> <p>-Students should have good problem solving skills</p> <p>-Introduction to Engineering Design</p> <p>-Computer Integrated Manufacturing</p> <p>-Principles of Engineering</p> <p>-Engineering Design & Development</p>										
<p>NETWORK SYSTEMS TECHNOLOGY</p> <p>PROGRAM LENGTH 3 Years</p> <p>CERTIFICATION TestOut NET Pro pc pro</p>	<ul style="list-style-type: none"> -Design, build, configure, and troubleshoot networks -Program routers and switches -Explore wireless and security methods -Learn with interactive and hands-on activities through the Cisco Academy -Prepare for a career as a Network Administrator, Technology Coordinator, Computer Support Specialist or Cable Installer -Students should be enthusiastic about computers and technology, be able to communicate well with others, and have above average math, reading, and science abilities and excellent problem solving skills 	<p>HEAVY EQUIPMENT MAINTENANCE</p> <p>PROGRAM LENGTH 3 years</p> <p>CERTIFICATION PA State Inspection License</p>	<ul style="list-style-type: none"> -Service, diagnose, repair, and rebuild trucks, tractors, logging, and construction equipment -Work on both gasoline and diesel powered engines -Use arc welding, oxy/acetylene cutting, and fabrication techniques -Prepare for a career as an Equipment Mechanic, Truck Mechanic, Equipment Manager or Parts Clerk -Students should have good mechanical problem solving and measurement skills and be willing to work outside in inclement weather and in a sometimes dirty environment 										
<p>PC NOW COLLEGE COURSES</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Construction Hand and Power Tools</td> <td style="width: 50%;">Basic Medical Terminology</td> </tr> <tr> <td>Framing Principles</td> <td>American Government</td> </tr> <tr> <td>Intro to Gaming & Simulations</td> <td>Fuel Systems</td> </tr> <tr> <td>Engineering Tech and Society</td> <td>General Psychology</td> </tr> <tr> <td>Brake Systems</td> <td>Heavy Duty</td> </tr> </table>				Construction Hand and Power Tools	Basic Medical Terminology	Framing Principles	American Government	Intro to Gaming & Simulations	Fuel Systems	Engineering Tech and Society	General Psychology	Brake Systems	Heavy Duty
Construction Hand and Power Tools	Basic Medical Terminology												
Framing Principles	American Government												
Intro to Gaming & Simulations	Fuel Systems												
Engineering Tech and Society	General Psychology												
Brake Systems	Heavy Duty												

The Capstone Work Experience Program is available for recommended students in all CTC programs of study. Seneca Highlands CTC is an equal rights and opportunities school.

