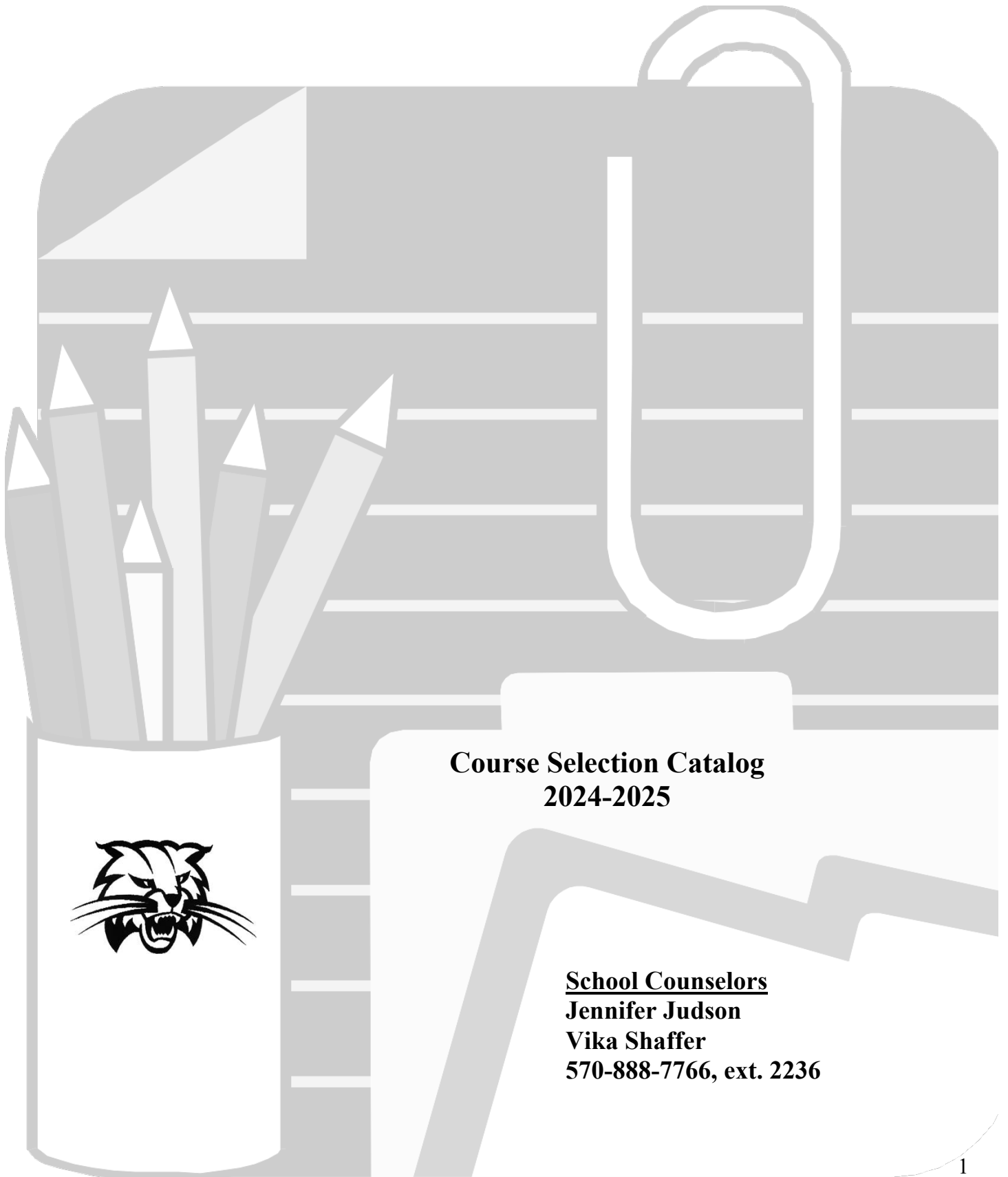


**Athens Area High School
Athens, Pennsylvania**



**Course Selection Catalog
2024-2025**



School Counselors
Jennifer Judson
Vika Shaffer
570-888-7766, ext. 2236

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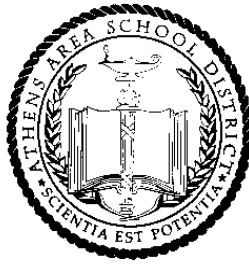
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The mission of the Athens Area School District, in collaboration with family and community, is to provide educational excellence by preparing students with the skills necessary to become life-long learners and responsible members of society.

LOCAL GOALS OF THE ATHENS AREA SCHOOL DISTRICT

1. We will provide quality programs and services in an environment where all individuals will be encouraged to respect each other and be responsibly involved in the educational process.
2. We will create a positive educational climate that is safe, physically comfortable, and readily accessible to all students.
3. We will be a learner-centered organization focused on intellectual development and personal growth.
4. We will form partnerships with families, business, government, and community organizations to enhance educational opportunities, maximize resources, and integrate services for all students in a fiscally responsible manner.
5. We will foster a love of learning and its value as a life-long process.
6. We will encourage all students to understand their personal importance and to confidently pursue a contributing role in the world community.

Discrimination Policy

Athens Area School District is an equal opportunity education institution and will not discriminate on the basis of race, color, national origin, sex, or handicap in its activities, programs, or employment practices as required by Title VI, Title IX and Section 504.

For information regarding civil rights or grievance procedures, contact Title IX coordinator, Craig J. Stage, Superintendent, Athens Area School District, 100 Canal Street, Athens, Pennsylvania 18810 (570-888-7766).

ATHENS AREA HIGH SCHOOL

401 WEST FREDERICK STREET, ATHENS, PA 18810
570-888-7766 • FAX: 570-888-4038 • WWW.ATHENSASD.ORG

“Building Foundations for Future Success.”

CRAIG STAGE, SUPERINTENDENT

WILLIAM CLARK, PRINCIPAL

DAVID GABRIEL, ASSISTANT PRINCIPAL

JENNIFER JUDSON, SCHOOL COUNSELOR

VIKA SHAFFER, SCHOOL COUNSELOR

March 2024

Dear Parents/Guardians and Students:

We are pleased to offer the Athens Area High School Course Selection Catalog to assist you in planning your academic studies for the 2023-2024 school year. The information contained in this publication has been prepared to familiarize you with specific course content, prerequisites, and suggested study for your career choices.

Academic planning requires the cooperation of parents, students, and school personnel. Our Guidance Information Services can supply you with additional educational and occupational materials to aid in your planning. Accurate and timely course selections will facilitate a schedule that meets the individual needs of each student. We offer many different career pathways. It will be helpful to use the information on the “What’s Your Interest?” page when making choices for your Course Selection Form.

We intend to offer a full complement of courses for 2024-2025. AAHS courses are aligned to the Pennsylvania State Standards and reflect the essential learnings necessary to ensure that all students have the opportunity to become college and career ready. Our students will be able to enroll in classes that will afford them the opportunity to earn college credits through two post-secondary institutions. It is our desire to team with parents to provide optimal educational opportunities for student success. We appreciate your cooperation and support. If you have any questions, please call the high school office.

Sincerely,

William J. Clark, Principal

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A MESSAGE FROM YOUR HIGH SCHOOL COUNSELORS

Please take a few minutes to review the course catalog for 2024-2025. It has been prepared to help you understand the courses that are available to you and the requirements necessary to graduate from Athens Area High School.

We will begin meeting with students in group-sessions to review the courses that are available and to provide instructions on completing the course selection form. We ask you to take the selection form home and discuss your choices with your parents and with the teachers who currently teach your courses. You could also email teachers with questions. While we hope to meet with all students who have questions, time constraints may still make this difficult. We would recommend emailing simple questions to your counselor and requesting a meeting for more complex questions. If you want to have an individual meeting with your counselor about your selections, indicate this by checking the appropriate box on the form. We will review all course selection forms when we receive them and will answer emails or meet with individual students as needed or requested. Either way, please be sure you have the required parent signature on the completed form before you return it. *Your form is due within five (5) days of receiving it.*

The selections you make now are not necessarily final. You will have an opportunity to make course changes in the summer after you receive your schedule in the mail.

However, we encourage you to strive for accuracy in making your selections during this process as we cannot guarantee that changes will be possible during the summer. If you have to make any changes to your schedule, those changes must be made during the summer schedule change period.

Jennifer L. Judson

jjudson@athensasd.k12.pa.us

Vika Shaffer

vshaffer@athensasd.k12.pa.us

GRADUATION REQUIREMENTS

Graduation Course Requirements

<u>Course Content Area</u>	<u>Credits Required</u>	
	NTCC Students	All Other Students
English	4.00	4.00
Science	3.00	3.00
Mathematics	3.00	4.00
Social Studies	3.00	3.00
Health/Physical Education	1.50	1.50
Electives	9.50	10.50
Total Required Credits to Graduate	24.00	26.00

All students must meet one of the Keystone Graduation Pathways criteria as listed on the ACT 158 Pathway Graphic page. We are encouraging all students to make every effort to meet the criteria for one of the first two options.

Students must carry the following minimum credits in each grade level.

Grade 10	7.00 credits
Grade 11	7.00 credits
Grade 12	6.00 credits

HONORS COURSES CRITERIA

- A. A student who currently is scheduled in an Honors course will be scheduled for the subsequent course in the next grade level, provided the student is successfully progressing. If a teacher believes a student is not progressing satisfactorily in an Honors course, the teacher will recommend that the student request a non-Honors course. If the student's parents want the student to continue in the Honors class, they must either contact the counselor or write a letter requesting the Honors course.
- B. A student who currently is not scheduled for an Honors course but wishes to be considered for the next level honors course must have a GPA of 95% or better in the non-Honors course and be recommended by the subject teacher.
- C. Students taking Honors/AP courses are expected to maintain a minimum grade of 77%.

GRADING SYSTEM

- A. The following are the percentage grades and their alpha equivalents that are used in grades 10, 11, and 12 at Athens Area High School.

93	to	100	=	A
85	to	92	=	B
77	to	84	=	C
70	to	76	=	D
Below 70			=	F
- B. To achieve honor roll status a student must earn an average of 93% or higher for all courses that use a percentage grade during any marking period.
- C. Class Rank is based on the cumulative average of all planned courses using a percentage grade.

EARN COLLEGE CREDITS

Athens Area High School students have the opportunity to earn college credit through Keystone College or Mansfield University for the following courses:

Estimated tuition costs per credit hour:

Commonwealth University: \$115 Keystone College: \$100

Athens HS Course	College	College Courses	Number of Credit Hours
Academic Psychology	Commonwealth	PSY 1101: Introduction to General Psychology	3
	Keystone		
Accounting	Keystone	Accounting Practices	3
Advanced Algebra/ Trigonometry	Keystone	Pre-Calculus	3
Advanced Drawing and Painting	Keystone	Drawing and Composition I	3
Anatomy and Physiology	Keystone	Human Anatomy and Physiology I	4
AP Biology	Keystone	General Biology I and II	4 per semester (8 total)
AP Calculus	Commonwealth	Calculus I	4
	Keystone		
AP Chemistry	Keystone	General Chemistry I	4
AP English Literature	Commonwealth	ENG 1115: Introduction to Literature	3
	Keystone	College Writing II: Writing About Literature	3
AP English Language & Composition	Keystone	College Writing I: Academic Writing	3
AP Government	Commonwealth	PSC 2201: Introduction to American Government	3
	Keystone	American National Government	3
AP Psychology	Commonwealth	PSY 1101: Introduction to General Psychology	3
	Keystone	General Psychology	3
AP Statistics	Commonwealth	Statistics	3
	Keystone		
Calculus	Commonwealth	MA 2231/2231L: Calculus I with Lab	4
Digital Media	Keystone	Digital Media Productions	3
Forensic Science	Keystone	Intro to Forensic Science I	4

Honors Chemistry (10 th Grade)	Commonwealth	CHM 1101: Introduction to Chemistry	4
Honors Physics	Keystone	General Physics	4

Microeconomics	Keystone	Principles of Microeconomics	3
Macroeconomics	Keystone	Principles of Economics I	3
Microsoft Office	Keystone	PC Office Applications	3
World History & Honors World History	Commonwealth	HST 1113: World History Since 1900	3
	Keystone	Making of the Modern World	3
Principles of Society	Keystone	Intro. to Sociology	3
Statistics	Keystone	Elementary Statistics	3
Spanish III	Keystone	Elementary Spanish I	3
Spanish IV	Keystone	Elementary Spanish II	3
AP Computer Science Principles	Keystone	Intro to Information Technology	3

For the listed courses, students have the choice of enrolling for both college credit and high school credit OR taking the course for high school credit only.

Will your credits transfer? Mansfield University, Keystone College, and Athens Area High School cannot guarantee the transfer of credit. It is best to check with the educational institution you plan on attending for verification. In the past, credits have transferred well to other institutions.

If you choose to register for the Commonwealth University concurrent enrollment credits, please follow these steps.

1. Visit the following website – www.commonwealthu.edu/early-college
2. Once website loads scroll down to the section where it says, “Want to join?” Please see the picture below.
3. Click the “apply now” button. Please do not click on the Authorization to participate form.
4. Create an application portal and apply as a new student for EARLY COLLEGE.
 - a. If you already completed an undergraduate application, choose yourself as a returning user and create a new application for EARLY COLLEGE
5. Enrollments need to be completed by Friday, September 13th, 2024.
6. Once the application is complete, parents will receive an authorization form to sign digitally.
7. Please have the student email krockwell@commonwealthu.edu to notify her that application is complete, and they are considered a concurrent enrollment student.

Keystone applications are handed out to students in their respective courses or can be picked up in the main office.

*Payments will be processed between the parent(s) and the university for both the Commonwealth University of Pennsylvania Keystone College.

If you have any questions, please contact your school counselor or Mr. Corey Mosher (570-888-7766, Extension 3261 or cmosher@athensasd.org).



ENGLISH 10 HONORS (Grade 10)

One Credit

Description: This course will focus on the literature, history, and people of the United States and the interaction of literature and history. All aspects of the English curriculum will be emphasized including grammar, speech, composition, vocabulary, and literature. Students taking this course should be highly motivated, keenly interested readers, thinkers, and learners. See Page 9 of the Introductory Section for additional honors criteria. This course is designed to prepare students for post-graduate studies at a two-year or four-year college or trade/technical school. The Literature Keystone Exam will assess students' mastery of the Literature Assessment Anchors and will be administered at the end of this course.

ENGLISH 10 (Grade 10)

One Credit

Description: This course is designed for all students who are not enrolled in English 10 Honors and will prepare students planning to enter the workforce, enlist in the military, or continue post-high school training at a two- or four-year college or trade/technical school. This course puts emphasis on the study of America's literature and people, vocabulary, listening/speaking skills, and note taking. Composition will include writing paragraphs, expository and analysis papers, and technical pieces. The course also includes some career-based exploration. The Literature Keystone Exam will assess students' mastery of the Literature Assessment Anchors and will be administered at the end of this course.

AP ENGLISH LANGUAGE AND COMPOSITION (Grade 12)

One Credit

Prerequisites: It is highly recommended that students seeking placement in AP English Language and Composition have taken and excelled in honors level English courses.

Teacher Recommendation is required.

Description: The AP English Language and Composition course cultivates the reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically: to communicate writers' intentions and elicit readers' responses in particular situations. The course cultivates the rhetorical understanding and use of written language by directing students' attention to writer/reader interactions in their reading and writing of various formal and informal genres (i.e., memos, letters, advertisements, political satires, personal narratives, scientific arguments, cultural critiques, research reports).

Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language (e.g., vocabulary, diction, syntax, spelling, punctuation, paragraphing, genre). The course helps students understand that formal conventions of the English language in its many written and spoken dialects are historically, culturally, and socially produced; that the use of these conventions may intentionally or unintentionally contribute to the effectiveness or ineffectiveness of a piece of writing in a particular rhetorical context; and that a particular set of language conventions defines Standard Written English, the preferred dialect for academic discourse.

At the end of the year, an optional AP exam may be taken to apply toward college credit, if passed.

Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee.

Financial assistance is available for those who need it.

ENGLISH 11 HONORS (Grade 11)

One Credit

Description: This course is a combination of high-level writing, speech preparation and delivery, and literary analysis. Composition will focus on planning, preparing, and writing expository and persuasive essays. Students will be required to complete a research project. There will be a focus on college-level vocabulary and essential grammar and usage. Regular journals are assigned to instill frequent rhetorical responses. Students will plan, prepare, and deliver a variety of speeches. This course is designed to prepare students for post-graduate studies at a two-year or four-year college or trade/technical school or to enlist in the military.

ENGLISH 11 (Grade 11)

One Credit

Description: This course is designed for all students who are not enrolled in English 11 Honors. It will prepare students planning to enter the workforce, enlist in the military, or continue post-secondary education at a two- or four-year college or trade/technical school. This course combines speech, composition, and literary analysis. Composition will focus on planning, preparing and writing expository and persuasive paragraphs and essays. Students will be required to complete a research project. Students will study vocabulary and essential grammar and usage. Regular journals are assigned to encourage regular writing. Students will plan, prepare, and deliver a variety of speeches.

AP ENGLISH LITERATURE (Grade 11)**One Credit****(Students taking AP courses are expected to maintain a minimum grade of 77%.)****Teacher Recommendation is required.**

Description: Advanced Placement English is a college level course offered for a full year. It is considered a core selection for senior English. The thrust of the course is a discussion of literature, writing and relevant composition work spanning a variety of time periods, cultures, and genres. At the end of the year, an optional AP exam may be taken to apply toward college credit, if passed. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it. Students taking this course will have the opportunity to earn three post-secondary credits through Commonwealth University or Keystone College. Students must maintain a “C” average in order to receive college credit. For specific information about college credits, refer to pages 10 and 11 of this catalog.

ENGLISH 12 HONORS (Grade 12)**One Credit**

Description: This is a college level course designed for students who can work at an accelerated pace and are motivated to develop deeper understandings through analysis of the great literature of the world and response through class discussion and evaluative writing pieces. It is designed to prepare students for post-graduate studies, four-year college or trade/technical schools or to enlist in the military. This comprehensive English course presents an opportunity to read and evaluate World Literature, improve writing skills and oral comprehension, and develop a working resume for use in the work place and/or college application.

ENGLISH 12 (Grade 12)**One Credit**

Description: This course is designed for all students who are not enrolled in English 12 Honors or AP English and will prepare students planning to enter the workforce, enlist in the military, or continue post-high school training at a two- or four-year college or trade/technical school. This comprehensive English course presents an opportunity to read and evaluate World Literature, improve writing skills and oral comprehension, and develop a working resume for use in the work place and/or college application.

CREATING AUTHENTIC VOICES (English 12 Alternative)**One Credit**

Description: What does it mean to be authentic? Simply put, it means to be genuine and real. That is the goal of this class. We will be exploring real-life situations and concepts. That doesn't mean we can't have a little fun with it. This course will be using fiction, non-fiction, graphic novels, films, videos, music, and poetry to explore self-knowledge and creative expression. Study will focus on how authors use writing to make meaning of their lives and experiences in all sorts of media. In turn, students should expect to be able to do the same thing through their own reflections and connections to the literature. Course content will adhere to PA ELA standards and PA Career Standards. Please note: because this is a class intended for seniors who experience many of the same situations as their young adult counterparts, there will be mature themes and content addressed. All situations/discussions will be handled professionally and tastefully.

YOUNG ADULT LITERATURE (English 12 Alternative)**One Credit**

Description: This course is designed to increase student reading through the use of contemporary literature geared just for this age group. Students will be exploring YA literature through a lens of analysis and connection. What about the literature is worthy? How can each of us connect to it? Does it reflect real life? What does “real life” even mean? All of these questions and more will be considered. The final project will consist of students choosing their own YA novel to read and defend as worthy to the rest of their classmates. Please note that many contemporary YA novels have mature content, violence and explicit language. By registering for this course, it is understood that parents have indicated that the students are allowed to read novels with this content.

ENGLISH ELECTIVES

CREATIVE WRITING (Grade 11,12 Elective)

One-Half Credit

Description: This course is intended for students who LOVE to write. Students are encouraged to express themselves through a variety of genres and forms, including fiction, non-fiction, and poetry. Students will read and discuss literary models, create their own writing, and critique their classmates' writing to encourage everyone to become better writers. As you move through the course, you will be expected to work more independently to develop your writing skills. It can be expected that students will be comfortable with sharing their work and accepting constructive criticism from their classmates, all with the goal of becoming advanced writers. Students will be creating a portfolio of work to be used in a final project.

ATHENIAN (Grades 10, 11, and 12)

One Credit

Class size is limited to 12 students

Description: This elective course will include all phases of yearbook production-page layout and design, copy writing, photography/art, fund-raising and sales. All participants will be required to write feature stories and do research. Students who elect this course must be prepared to participate in all aspects of production. Basic computer literacy is required; experience with graphic design and Photoshop is helpful. Production demands require additional time beyond normal class limits, especially during deadline periods. Students must be able to meet deadlines and accept responsibility for completion of all assignments. This class meets all year long. When the yearbook is completed, the class will begin planning and designing content for the following school year.

LYRICS AND LITERATURE (Grades 10, 11, and 12)

One-Half Credit

Description: Take your love of contemporary music to a different level! This course explores words and music throughout modern music history from rock n' roll to modern hip-hop. Students will experience some history of American music, and will investigate how history and society have influenced the topics, themes, and styles of popular music artists over time as we explore the "literature" of the lyrics.

SPORTS LITERATURE (Grades 10, 11, and 12)

One-Half Credit

Description: This course is designed to offer students a look at legendary athletes from the past as well as athletes who are having an impact on the world today. It will also explore careers that are offered in the sporting venues other than being a professional athlete. Students will learn and understand the classification of high school athletics around the country and in Pennsylvania. Students will also watch films in class that have had a monumental impact on the athletic world. Writing assignments or projects that deal with topics such as segregation in sports, overcoming odds, violating rules and the consequences that follow will follow each movie. Current events will be addressed throughout the class.



Social Studies Sequence

- Grade 9 – U.S. History II
- Grade 10 – Civics and Government
- Grade 11 – Modern World History
- Grade 12 – Electives

CIVICS AND GOVERNMENT (Grade 10)

One Credit

Description: This course is designed to provide the students with an understanding of the theories and components of the governmental system of the United States of America. Topics of study include the purpose and function of government, interpretation and application of law, and the role of individual citizens. Students enrolled in this course will be required to complete the Act 35 Civics Assessment.

MODERN WORLD HISTORY (Grade 11)

One Credit

Description: The primary purpose of this course is to develop in the student an understanding of and an appreciation for the heritage of the past. This course includes a survey of world events from 1450 A.D. to present time. A careful examination of the factors influencing mankind's development, of basic inventions, discoveries, beliefs, and how they contributed to advancements in civilization provide the core of this course. Comparative studies of major revolutionary movements, the development of the modern nation-state, industrial and technological advances, colonialism, and imperialism will be included. Critical thinking and writing skills will be emphasized, along with historical research and analysis skills.

NOTE: Students who schedule Modern World History or Honors Modern World History have the opportunity to earn three college credits through Commonwealth University or Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

HISTORY ELECTIVES

AP U.S. GOVERNMENT AND POLITICS (Grades 11 and 12)

One Credit

Prerequisites: Honors Social Studies or Teacher Recommendation

(Students taking AP courses are expected to maintain a minimum grade of 77%.)

Description: This college level course is designed to explore political theory and current practices that direct the operations of the American government. It provides a foundation for understanding, exploring and evaluating the American government and political system. Current political, legal and government issues will be used to evaluate how the government shapes public policy and how it affects other social institutions and the people of the United States. The course prepares students to take the Advanced Placement U.S. Government and Politics Exam. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Commonwealth University or Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

AP PSYCHOLOGY (Grades 11 and 12)

One Credit

Prerequisites: Honors Social Studies or Teacher Recommendation

(Students taking AP courses are expected to maintain a minimum grade of 77%.)

Description: This college level course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the principles and phenomena associated with each of the major sub fields within psychology. The students also learn about the ethics and methods psychologists use in the science and practice. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it

NOTE: Students who schedule this course have the opportunity to earn three college credits through Commonwealth University or Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

ACADEMIC PSYCHOLOGY (Grades 11 and 12)

One Credit

Description: This course is designed to give students an overview of the field of Psychology. Topics of study include: research methods, neurophysiology, sensation and perception, learning, memory, motivation, personality, development, abnormal psychology and therapy, and social psychology. Human interest and popular psychology are also attended to, including ESP, altered states, etc. The goal of the course is to provide the student with practical as well as academic knowledge.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Commonwealth University or Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

PRINCIPLES OF SOCIETY (Grades 11 and 12)**One-Half Credit**

Description: Sociology is the study of society. This social science focuses on looking at people and at their ways of life as well as studying social trends, cultural changes, human development, social institutions, and collective behavior. Studying sociology means looking at why things are the way they are and at the relationships between humans and the world around them. This course explores issues and topics of human social behavior through sociological perspectives. Topics include cultural diversity, conformity, social organization, socialization, social institutions, group behavior, social control, and deviance. It also investigates the issues of racial and ethnic relations, economy and politics, education and religion, and the mass media in a pluralistic society.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

MACROECONOMICS (Grades 11 and 12)**One-Half Credit**

Description: Macroeconomics is a social science course that introduces students to the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination. It examines the interactions of all of a nation's households, firms, government, and foreigners in determining the overall level of output, employment, and the price level in a nation. Students become familiar with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

MICROECONOMICS (Grades 11 and 12)**One-Half Credit****Prerequisites: Honors Social Studies or Teacher Recommendation**

Description: Economics is all around you. Developing an understanding of the impact of economic principles on your day-to-day life will help you make better economic choices. It will prepare you to live in a global economy – it is the money in your pocket! The main objective of this course is to give students a broad understanding of the choices people make in using scarce resources to meet their wants. In Microeconomics, we study how these scarce resources are allocated within the market system. Topics include: scarcity and opportunity cost, types of economic systems, supply and demand analysis, comparative advantage, price ceilings/floors, price discrimination, market structures, business organizations, monopoly, and labor and wages.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.



BIOLOGY I (Grade 10)**One Credit**

Description: A biology course for tenth grade students, this course will focus on Cells and Cell Processes and Continuity and Unity of Life. Units will include basic biological principles, the chemical basis for life, bioenergetics, homeostasis and transport, cell growth and reproduction, genetics, theory of evolution, and ecology with an emphasis on the practical application of biological knowledge utilizing STEM based techniques. The Biology Keystone Exam will assess students' mastery of the Biology Assessment Anchors and will be administered at the end of the course.

CHEMISTRY I**One Credit**

Description: This course provides students with an understanding of chemical principles and skills that are needed for college. Chemistry I will include the topics of general chemistry: atomic structure, bonding, periodicity, chemical formulas and equations, stoichiometry, gas laws, KMT, solutions, and acid-base chemistry. Weekly lab experiments and investigations will emphasize those concepts and will utilize STEM based techniques to enhance problem solving and science process skills.

STEM CHEMISTRY I**One Credit**

Prerequisites: Successful completion of Algebra I or Algebra IB, STEM Physical Science and Biology I, or teacher recommendation.

Description: This course emphasizes all of the Chemistry I topics of general chemistry. Students will focus on real world problems in a practical hands-on approach to learn the subject matter through investigation.

HONORS CHEMISTRY I (Grade 10)**One Credit**

Prerequisites: Honors Biology, Satisfactory Completion of Algebra I, or teacher recommendation.

Description: The Honors Chemistry I will include a more in-depth coverage of the topics discussed in Chemistry I plus equilibrium concepts. A project may be required. Strong analytic skills are needed. Weekly lab experiments will emphasize those concepts and will utilize STEM based techniques. This is a more rigorous chemistry course, requiring mathematical experience, and a greater commitment from the student. The course includes the content in the Chemistry I course, with an additional emphasis on advanced topics for the college bound or AP Chemistry student.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Commonwealth University. For specific information about college credits, refer to pages 10 and 11 of this catalog.

CHEMISTRY IN THE COMMUNITY (CHEMCOM) (Grades 11 and 12)**One Credit**

Description: Chemistry in the Community, or ChemCom is intended for the student who does not plan to major in science in college. It is a practical, hands-on approach to chemistry. Topics covered are: water chemistry, chemical resources, and petroleum. Time permitting, the atmosphere, gas laws, and food chemistry can be studied. Students will do numerous lab experiments, participate in small group discussions, and practice decision-making activities. ChemCom is designed to help students (1) realize the important roles that chemistry will play in their lives, (2) use chemical knowledge to make informed decisions about science issues, and (3) develop a lifelong awareness of the potential and limitations of science and technology.

AP PHYSICS 1 (Grade 11 or 12)**One Credit**

Prerequisite: Trigonometry or Concurrent Enrollment

Description: AP Physics 1 is a full-year algebra-based physics course that is the equivalent of a first-semester introductory college course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For

specific information about college credits, refer to page 10 and 11 of this catalog.

HONORS PHYSICS (Grade 11 or 12)

One Credit

Prerequisite: Trigonometry or Concurrent Enrollment

Description: Physics is a full year course that examines the relationship between the natural science and mathematics. Some of the topics covered are velocity, acceleration, laws of falling bodies, projectile motion, Newton's Laws of Motion, forces, energy, equilibrium, friction, momentum, circular motion, static and current electricity, sound, nuclear, and light. Lab experiments will utilize STEM based techniques. The course is recommended for college prep students, especially those students planning to enroll in any college science, health-related, or engineering programs.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

PHYSICS (Grade 11 or 12)

One Credit

Prerequisite: Trigonometry or Concurrent Enrollment

Description: Physics is a full year course that examines the relationship between the natural science and mathematics. Some of the topics covered are velocity, acceleration, laws of falling bodies, projectile, motion, momentum, circular motion, static and current electricity, sound, nuclear, and light. There will be STEM based explorations. The course is recommended for college prep non-science majors, non-science education majors, and technical school students.

SCIENCE ELECTIVES

AP BIOLOGY (Grade 11 or 12)

One Credit

Prerequisite: B average in Biology I and Chemistry or Teacher/Counselor Recommendation (Students taking AP courses are expected to maintain a minimum grade of 77%.)

Description: The Advanced Placement Biology course is a yearlong program designed to meet the criteria of the College Board and the dual enrollment program. It is designed for students who have successfully completed a first course in Honors high school biology and high school chemistry. This course is supported by weekly labs intended to develop the students' science process skills. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee.

Financial assistance is available for those who need it.

NOTE: Students who schedule this course have the opportunity to earn eight college credits (four per semester) through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

AP CHEMISTRY (Grade 11 or 12)

One Credit

Prerequisite: Honors Chemistry or Staff/Counselor Recommendation (Students taking AP courses are expected to maintain a minimum grade of 77%.)

Description: The course topics are equilibrium, kinetics, thermodynamics, and more advanced work on the topics from Chemistry I. This course is directed towards students interested in medicine, engineering, and sciences. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it. There will be weekly lab experiments.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

ANATOMY AND PHYSIOLOGY (Grades 11 and 12)

One Credit

Prerequisite: Biology and Chemistry/ChemCom or Biology and Concurrent Chemistry/ChemCom

Description: This yearlong course is designed to supply a background in human anatomy and physiology. Students who wish to pursue a health related career are encouraged to schedule this course. The course will include topics in chemistry and cells and tissues as they relate to the organ systems of the human body. A college level text will be used.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

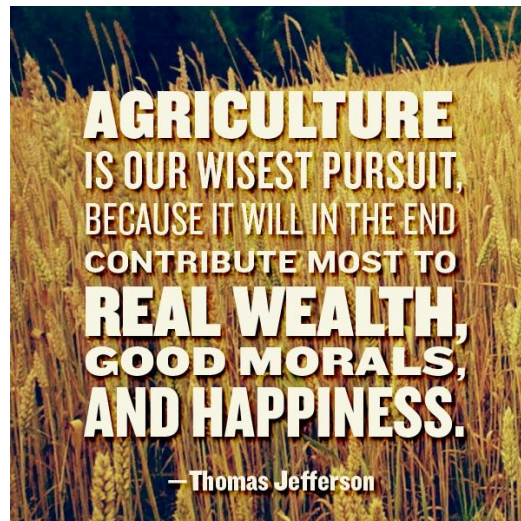
FORENSIC SCIENCE (Grade 12)**One Credit****Prerequisite: Biology and Chemistry/ChemCom or Biology and Concurrent Chemistry/ChemCom**

This is an elective lab science course designed to incorporate elements of biology, chemistry, and physics. The course targets students who have completed at least biology. Units are planned to provide a bridge for students between scientific procedures and the real-life applications of forensic science to solving crimes. Topics include forensic anthropology, blood splatter & blood analysis, hair and fiber analysis, ballistics, DNA evidence, biochemistry, etc. Activities will require students to act as investigators with “unsolved investigations” serving as the impetus for labs. Students will be required to gather data, think critically and logically about relationships between evidence and explanations, construct and analyze alternative explanations, and communicate scientific arguments.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

AGRICULTURAL EDUCATION

Agricultural Science and Technology



AGRICULTURE SCIENCE AND TECHNOLOGY

Agriculture is the number ONE industry in both Pennsylvania and the United States, employing over 20 percent of the U.S. workforce. Today's agriculture is science and technology oriented. Diverse areas of agriculture include food science, horticulture, forestry and natural resources, agribusiness, aquaculture, animal and plant science, biotechnology, tissue culture, hydroponics, agricultural business management, and agricultural mechanics. Most agricultural science courses offered at AAHS will revolve around hands-on experiences. Any student who schedules an agriculture course during the school year will become a member of FFA and will be able to engage in leadership and course specific events through the organization. Agriculture courses are designed for both college preparatory and technology preparatory students.

Enrollment Protocol:

Enrollment for the Agriculture Program at Athens Area High School is unlimited. The schedule is student driven and the number of students interested in a course determines the number of sections needed for the course.

AGRICULTURAL ANIMAL SCIENCE PATHWAY

Recommended Sequence	Course	No. of Credits
9/10	Introduction to Agriculture	1
10/11	Animal Science	1
11/12	Veterinary Science	1

INTRODUCTION TO AGRICULTURE (Grades 9, 10)

One Credit

Description: This course is a prerequisite for higher level agriculture courses. Students are introduced to current events in agriculture, crops, soils, conservation, livestock, and fields of agriculture service and occupations. Students will participate in the National FFA Organization and learn about its importance in agricultural education. Emphasis is placed on presenting opportunities for students both in and outside of class time in FFA and SAE (Supervised Agricultural Experience). Topics include but are not limited to public speaking, leadership, animal science, plant science and natural resources. Students are engaged in active learning in class and by participating in FFA events and opportunities

ANIMAL SCIENCE (Grades 10-12)

One Credit

Prerequisite: Introduction to Agriculture

Description: This course provides a practical approach to the study of livestock and companion animals. Students will explore careers, animal health and safety, and many different animal species. In any given school year, the following units may be taught: Animal Biology; Animal Health, Animal Reproduction, and Animal Systems. Students will also be able to engage in specific species including but not limited to Swine, Poultry, Dairy, Equine, Beef, Small Animals, and or Exotic Animals.

VETERINARY SCIENCE (Grades 11 and 12)

One Credit

Prerequisite: Animal Science and/or Biology

Description: This elective agricultural science course is designed to incorporate the student's knowledge of biology, zoology, and chemistry in regards to animal science. These topics include Comparative Anatomy and Physiology, Nutrition, Diseases, and Surgery in animals. Emphasis will be placed on understanding the function of different body systems in various species. Veterinary science topics relate to both livestock and companion animals and do not focus on one specific species. Students will be able to engage in labs and dissections throughout the year.

AGRICULTURAL MECHANICS PATHWAY

Recommended Sequence	Course	No. of Credits
9/10	Introduction to Agriculture	1
10/11	Agricultural Mechanics I	1
11/12	Agricultural Mechanics II	1

INTRODUCTION TO AGRICULTURE (Grades 9, 10)

One Credit

Description: This course is a prerequisite for higher level agriculture courses. Students are introduced to current events in agriculture, crops, soils, conservation, livestock, and fields of agriculture service and occupations. Students will participate in the National FFA Organization and learn about its importance in agricultural education. Emphasis is placed on presenting opportunities for students both in and outside of class time in FFA and SAE (Supervised Agricultural Experience). Topics include but are not limited to public speaking, leadership, animal science, plant science and natural resources. Students are engaged in active learning in class and by participating in FFA events and opportunities

AGRICULTURAL MECHANICS TECHNOLOGY I (Grades 10-12)

One Credit

Description: This course provides a practical and theoretical approach to the understanding of the broad field of agricultural mechanics, the safe operation of machines, and safe work habits. Course content may include: Using the Agricultural Mechanics Shop; Metalworking; Power Tools in the Agricultural Mechanics Shop; Project Planning; Gas Heating, Cutting, Brazing, and Welding; Arc Welding; Small Gas Engines; Electricity and Electronics; Plumbing, Hydraulic, and Pneumatic Systems; Concrete and Masonry; Agricultural Structures. Students, being enrolled in Agricultural Mechanics are FFA Members and will have the opportunity to engage in leadership and course specific FFA events.

AGRICULTURAL MECHANICS TECHNOLOGY II (Grades 11-12)

One Credit

Prerequisite: Agricultural Mechanics Technology I

Description: Agricultural Mechanics II is a full year course that provides a practical approach to equipment, machinery, building construction, and metalworking. Students taking this course are expected to use knowledge gained from Agricultural Mechanics I to work on projects of their choosing. Projects and topics can include metalworking, small engine and outdoor power equipment, building construction, concrete masonry, and equipment maintenance. Materials needed for student projects are the responsibility of the student, unless it is a school assigned project. Students are expected to have project plans, determine a bill of materials, and successfully complete at least one major project per school year quarter.

HORTICULTURE (Grades 10-12)**One Credit****Prerequisite: Introduction to Agriculture**

Description: This course is an agricultural science course as well as a general elective science class and is available to all students with an interest in the areas of horticulture and aquaculture. The course topics include the overview of horticulture, science of horticulture, greenhouse management and production, technology in horticulture and hydroponics. Students will utilize the school greenhouse and landscape to apply classroom learning.

AGRICULTURE AND NATURAL RESOURCES (Grades 10-12)**One Credit****Prerequisite: Introduction to Agriculture**

Description: This course focuses on exploring our natural resources. Students will examine soil, water, forests, wildlife and much more. Topics covered may include the management of environmental resources, preservation and conservation, stream studies, forest management, effects of pollution, wildlife management, careers in natural resources, and much more. Students will examine both local and global examples of natural resource management.

AG BUSINESS & ENTREPRENEURSHIP (Grades 10-12)**One-Half Credit****Prerequisite: Introduction to Agriculture**

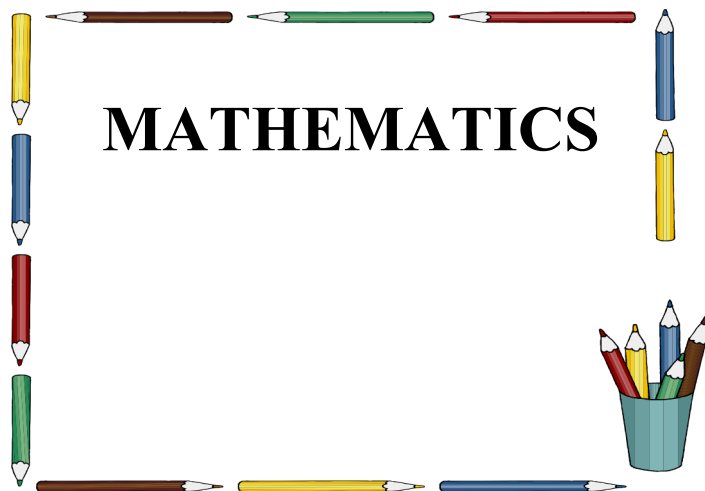
Description: What is a sole proprietorship for an agriculture business? How is this different from a partnership? What are assets versus liabilities? How can I get a good credit score? These are all questions that will be addressed in the Ag Business and Entrepreneurship course with an emphasis on agricultural businesses. This half-year course involves students learning about principles of business, and then applying those concepts and skills to create an agriculturally related business plan. Students are encouraged to take this course even if they don't think they will form their own business. Students enrolled are a part of the Athens FFA, and will be encouraged to participate in FFA events, activities, and competitions.

FOOD SCIENCE (Grades 11-12)**One-Half Credit****Prerequisite: Introduction to Agriculture, Biology**

Description: Any student who eats food should take this course! Other than taste, what are qualities to consider for different foods? This course will cover topics relating to many aspects of food science. Food processing, food production, food testing, the chemistry of food science, and much more. Students will engage in labs that explore the many aspects of different foods such as texture, components, composition, taste, smell, and much more. Students enrolled are a part of the Athens FFA, and will be encouraged to participate in FFA events, activities, and competitions.

SUPERVISED AGRICULTURE EXPERIENCE (SAE) I, II, III**One Credit****Prerequisite: Introduction to Agriculture, and student must be an active FFA member and have approval from Mr. Steinfelt.**

Description: Supervised Agriculture Experience is a record-keeping project designed to give students real world, practical experiences in many different areas. Students will use the Agriculture Experience Tracker (AET) to make project journal, financial, award, and community service entries. SAE areas include paid and unpaid placement, entrepreneurship, and exploratory. Once an area has been chosen, students will be expected to keep accurate records on their project that include income, expenses, time and labor. SAE is an integral part of the FFA program and is the basis for many awards and scholarships. It is a great management tool and prepares students for premier leadership, personal growth and career success. Additionally, students will help plan and execute FFA related functions such as the annual FFA Banquet, Rusty Rail Food Drive, FFA week activities, leadership conferences and preparing for local and state level Career Development Events and Leadership Development Events.



2023-2024	2024-2025
If you passed:	You will take:
Honors Geometry	Honors Algebra II
Algebra IA	Algebra IB
Honors Algebra II	Honors Adv Algebra/Trig
Algebra II	Geometry or Practical Math
Algebra IB (9)	Algebra II
Algebra IB (10)	Geometry or Practical Math
Honors Adv Algebra/Trig	AP Calc / Calculus / Stats
Geometry	Trig-PreCalculus / Stats
Financial Math	Algebra II or Practical Math
Practical Math	Algebra II or Financial Math

ALGEBRA IB (Grades 9-12)**One Credit****Prerequisite:** Algebra IA or Algebra I (8th Grade)**Description:** Algebra IB is offered to students who have successfully completed Algebra IA. The course will develop a foundation necessary for the student to continue in the study of mathematics. The topics of study are:

1. Systems of linear equations and inequalities.
2. Exponents and exponential functions.
3. Quadratic equations and functions.
4. Polynomials and factoring.
5. Rational equations and functions.
6. Radicals and connections to geometry.

ALGEBRA II (Grades 10-12)**One Credit****Prerequisite:** Algebra I or Algebra IB**Description:** This course is offered to all students who have successfully completed Algebra I. It is intended to provide a strong background for future courses and studies. Contents of the course include equations and inequalities on a variety of levels, linear functions, systems of linear equations and inequalities, polynomials, rational expressions, radical expressions, and quadratic relations and functions. Also included are higher degree polynomial functions, complex numbers, parabolas, and exponential and logarithmic functions. If time permits, other conic sections will be pursued. This course is a prerequisite for Trigonometry/Pre-Calculus Mathematics and Calculus.**HONORS ALGEBRA II (Grade 10)****One Credit****Prerequisite:** Honors Geometry 9**Description:** This course is offered to students who have successfully completed Honors Geometry 9. It is intended to provide a strong background for future courses and studies. Contents of the course include equations and inequalities on a variety of levels, linear functions, systems of linear equations and inequalities, polynomials, rational expressions, radical expressions, and quadratic relations and functions. Also included are higher degree polynomial functions, complex numbers, parabolas, and exponential and logarithmic functions. If time permits, other conic sections will be pursued.**GEOMETRY (Grades 10-12)****One Credit****Prerequisite:** Algebra I**Description:** This is a mathematics course for those students who have successfully completed Algebra I. It covers the use of plane and solid geometry with emphasis placed on the development of logical thinking by the use of geometric proofs and on the application of the geometric properties.**PRACTICAL MATHEMATICS (Grade 11 or 12)****One Credit****Prerequisite:** Algebra IB**Description:** This course prepares students to mathematically navigate personal finance with confidence. The course opens with a study of what it means to be financially responsible, engaging students in budgeting, planning, and being smart consumers. Students learn about the relationship between education, employment, income, and net worth, and they plan for the cost of college. Students then broaden their study to include banking, spending, investing, and other money management concepts before exploring credit and debt. In the final unit of the course, students study microeconomics and entrepreneurship, with an overview of economic systems, supply and demand, consumer behavior and incentives, and profit principles. The course concludes with an in-depth case study about starting a business.**FINANCIAL MATHEMATICS (Grade 11 or 12)****One Credit****Prerequisite:** Algebra IB**Description:** This course focuses on the applications of mathematics in both personal and business settings. This course contains 15 major topics encompassing many aspects of financial math: personal financial planning, income, budgeting and wise spending, banking, paying taxes, the importance of insurance, long-term investing, buying a house, consumer loans, consumer credit, consumer debt, economic principles, traveling abroad, starting a business, and analyzing business data. Students apply various math skills such as percents, proportions, probability, data analysis, linear systems, exponential functions and formulas to real life situations. A unique feature of this course is that each lesson is centered on the mathematical skills used in the world of personal finance. Students participate in interactive activities and use inquiry to explore scenarios that are relevant to their lives.

AP STATISTICS (Grades 11 or 12)**One Credit****Prerequisite:** Algebra II

Description: AP Statistics is the high school equivalent of a one semester, introductory college statistics course. In this course, students develop strategies for collecting, organizing, analyzing and drawing conclusions from data. Students design, administer, and tabulate results from surveys and experiments. Probability and simulations aid students in constructing models for chance phenomena. Sampling distributions provide the logical structure for confidence intervals and hypothesis tests. Students use a TI-84 graphing calculator and computer based statistical software to investigate statistical concepts. To develop effective statistical communication skills, students are required to prepare frequent written and oral analyses of real data. Students will also work in groups to complete projects based on real world statistical applications. Projects will require them to collect, analyze and interpret data. Each student will be required to complete a summer AP Statistics packet, which will develop a solid foundation for student's success in the course.

At the end of the year, an optional AP exam may be taken to apply toward college credit, if passed.

Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

STATISTICS**One Credit****Prerequisite:** Algebra II

Description: Statistics is offered to any junior or senior having completed Algebra II successfully. Statistics is the collection, organization, interpretation and presentation of data. Statistics is closely connected to probability, especially in making inferences. The course lays a foundation in vocabulary and methods of descriptive statistics and probability and leads to a large project involving summary statistics and inferential statistics.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

TRIGONOMETRY/PRE-CALCULUS (Grade 12)**One Credit****Prerequisite:** Algebra I and II and Geometry

Description: The trigonometry portion of the course (intended for grade 12 students) has two objectives. The first objective is the obvious--working with dimensions of triangles, while the second is that of having the student experience the development of a complete mathematical system from the definitions of the six trigonometric functions. The pre-calculus portion of the course addresses sequences and series, combinations, permutations, probability, theory of equations, exponential and logarithmic functions, limits, and analytic geometry. The course is designed to prepare students for calculus, pre-calculus mathematics, quantitative methods, college algebra or similar courses at the university level.

ADVANCED ALGEBRA/TRIGONOMETRY (Grade 11)**One Credit****Prerequisite:** Algebra I and II and Geometry

Description: This course is an academic course (with proofs) primarily for eleventh grade students in preparation for calculus. The course is highly dependent upon the use of technology, and a graphing calculator with regression functions is recommended for the student to be successful. Course topics include a library of functions and their inverse. Shifting and reflecting of graphs is a theme throughout the course. A partial list of functions to be studied include polynomial, exponential, rational, and trigonometric. Other pre-calculus topics include progressions and series, fundamental probabilities, systems of equations, analytic geometry, and statistics.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

CALCULUS (Grade 12)**One Credit****Prerequisite:** Algebra I and II, Geometry, and Advanced Algebra/Trigonometry

Description: This is a college level course that includes both differential and integral calculus. The course is predominately theoretical in nature; however, applications such as velocity, acceleration, area, and volume will be studied also.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Mansfield University. For specific information about college credits, refer to pages 10 and 11 of this catalog.

AP CALCULUS AB (Grade 12)**One Credit****Prerequisite: Algebra I and II, Geometry, and Advanced Algebra/Trigonometry (Students taking AP courses are expected to maintain a minimum grade of 77%.)**

Description: Calculus AB is intended for students who have a thorough knowledge of college preparatory mathematics, including algebra, axiomatic geometry, trigonometry, and analytic geometry (rectangular and polar coordinates, equations and graphs, lines, conic, and logarithmic and exponential functions). This is a course in introductory calculus with elementary functions. Students who pursue the course make a commitment to its rigorous and challenging nature with the possibility of advanced placement and/or college credit should they pass the year end test designed by the College Entrance Examination Board and Educational Testing Service. The course also provided the students yet another opportunity to better judge his/her capability and potential for success at the university level and to enter those studies with less anxiety and increased confidence. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

NOTE: Students who schedule this course have the opportunity to earn four college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.



FOREIGN LANGUAGE

Spanish Grades 10-12

(One Credit Each Level)

Description: In the first year, students developed an understanding and use of basic vocabulary and high frequency phrases of the foreign language and expand their knowledge of the various cultural aspects of the countries where the language is spoken.

By the end of the second year, students should be able to reach the oral proficiency level of Intermediate Low as defined by the guidelines of the American Council on the Teaching of Foreign Language. (They will learn to handle successfully a number of interactive, task-oriented and social situations. They will demonstrate that they can create with the language, ask and answer questions, initiate and respond to simple statements and maintain face-to-face conversation in limited situations. Students will also learn to perform such basic communicative tasks as introducing and describing self and others, ordering a meal, asking directions and making purchases). Study of the culture and customs of the countries where the language is spoken will continue.

Years three and four are designed to increase a student's oral proficiency and provide experiences in literature, writing and the culture of the countries where the language is spoken.

Other foreign languages are available through our Wildcat Online Learning Academy (WOLA). If you are interested in learning a language other than Spanish, please request a meeting with your school counselor.

Note: Students who schedule Spanish III and Spanish IV have the opportunity to earn three college credits per course through Keystone College. For specific information about the dual enrollment program, refer to pages 10 and 11 of this catalog.

BUSINESS EDUCATION

Bringing the business world into the classroom



Recommended Sequence	Course	No. of Credits	
9/10	MS Office	.5	Dual Enrollment
9/10	Business/Entrepreneurship	1	
11/12	Marketing	1	
11/12	Accounting	1	Dual Enrollment
12	Financial Management	.5	

MICROSOFT OFFICE (Grades 9, 10)**One-Half Credit**

Description: Stay current with useful technology! Here's your opportunity to learn the most popular productivity software used in the business world. In addition to teaching Windows Theory and File Management, this course teaches the MS Office 2016 Suite ~ Word, Excel, Access, and PowerPoint. This class will be beneficial to everyone regardless of their career plans.

NOTE: Students who schedule this course will have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

BUSINESS/ENTREPRENEURSHIP (Grades 9, 10)**One Credit**

Description: This course is designed to integrate two previous classes, Introduction to Business and Entrepreneurship. Real-world business consists of passions and interests that are developed into exciting and rewarding careers. Throughout the year, students will be introduced to fundamental business concepts, business law, leadership qualities, banking and finance, global business, marketing, and entrepreneurship. Students will complete a culminating Business Plan centered around individual interests.

MARKETING (Grades 11, 12)**One Credit**

Prerequisite/Concurrent Courses: Accounting, Intro to Business, Entrepreneurship

Description: Students will learn the basic concepts of marketing – Price, Product, Promotion, and Placement while being provided the opportunity to work on community projects that focus on digital marketing and communications. Areas of Hospitality Management and Sports Marketing will also be incorporated.

ACCOUNTING (Grades 11, 12)**One Credit**

Description: If you plan to major in business at the college level, you need this class. Past graduates of Athens who have gone on to earn a business degree stress the importance of having a strong accounting background prior to college. These skills are useful whether you are the CEO of a Fortune 500 company or you are running the family business. In Accounting you will learn the basics of debits and credits while keeping financial records organized.

NOTE: Students who schedule this course will have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

FINANCIAL MANAGEMENT (Grade 12)**One-Half Credit**

Description: This is a course no high school student should do without. You will learn about numerous personal financial issues: budgeting, checking and savings accounts, taxes, investing basics, credit management, insurance, loan applications, scholarships, financial aid information, and more. Real life is hard – having a good financial background will help you succeed as a young adult.



Students who have a career interest that focuses on human development, child care or teaching would find these courses advantageous.

HUMAN RELATIONS I (Grades 10-12)

One-Half Credit

Description: This course focuses on a better understanding of the development of self and explores the consequences of decision-making. A few of the topics that will come up in the course are; situations with preventative discussion involving teen pregnancy, drugs and alcohol, as well as suicide. Students will be required to take home a simulated baby for two days of a week as part of their final project.

HUMAN RELATIONS II (Grades 10-12)

One-Half Credit

Prerequisite: Human Relations I

Description: This course builds on Human Relations I and consists of the development of the life cycle from birth to death. The course topics include community characteristics of being successful when single and married, discussions on sexual responsibility, pregnancy and birth, child development, and parenting skills. Students will be required to create and present a final project that can be simulated in a real-life child care situation.

Students who have career interests that focus on culinary arts, restaurant management, or nutrition would find these courses advantageous.

COOKING I (Grades 10-12)

One-Half Credit

Description: The importance of safety and sanitation, the basics of kitchen equipment, cooking terminology, measurements and recipe reading will be addressed in this course. Other topics that will be taught include nutrition guidelines, understanding labels, nutrients, and nutrition-related health issues. Students will be required to make foods in relation to each topic discussed.

COOKING II (Grades 11-12)

One-Half Credit

Prerequisite: Cooking I

Description: This course will build on and review the skills learned in Cooking I. The students will develop more culinary techniques using the principles of baking. They will be required to prepare and learn the principles of pastries, cookies, cakes, and breads.

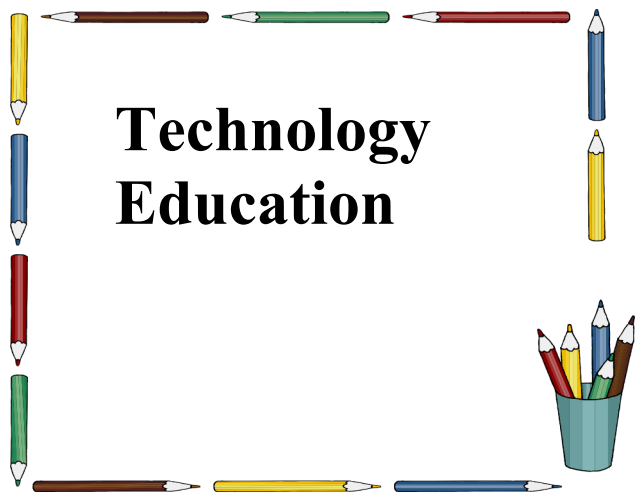
Students who have career interests that focus on fashion design, tailoring, or altering would find this course advantageous.

SEWING (Grades 10-12)

One-Half Credit

Description: This course is designed to develop the **basic** knowledge and skills of sewing and mending. Course topics include the purpose of clothing and how to identify the basic tools and equipment used for sewing. Students will be required to understand techniques by creating samples before they can sew, as well as create inexpensive projects for a charity and for themselves.

Students will be required to purchase their own supplies for their projects.



GRAPHIC COMMUNICATIONS (Grades 9-12)**One-Half Credit****Prerequisite: None**

Description: This course provides a broad overview of communication systems—print and electronic media. Students will experience individual and group activities to enhance and promote the understanding of visual design using the following equipment and software: Adobe InDesign, Adobe Photoshop (Pro 2022), and Adobe Illustrator (Pro 2022). These programs will be used to complete projects such as a set of company documents, assorted graphical logo work (raster and vector based), and a variety of application projects.

DIGITAL MEDIA (Grades 10-12)**One Credit****Prerequisite: None**

Description: Students will work on a variety of hands-on projects that will focus on real-world/projects. The tools that will be used include: Macintosh and Windows computers, Internet, digital cameras, camcorders, and scanners. Class projects include: TV commercials, videos, video yearbook, and digital photography. Some software that will be used includes: Photoshop Pro 2022, Aftereffects, Pro 2022 and Garageband.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

VIDEO PRODUCTION (Grades 11 and 12)**One Credit****Prerequisite: Digital Media or Instructor's Permission**

Description: Students will learn how to create storyboards, write video scripts, shoot video, and edit video clips. Students will shoot short film projects and learn how to use video production equipment to express their creativity and demonstrate their acquired skills. The class will create a digital newscast that will air throughout Athens Area High School. Students will have the opportunity to learn camera techniques, audio, teleprompting, graphics, editing, lighting, interviewing, reporting, script writing, anchoring, producing, and directing.

MANUFACTURING SYSTEMS (Grades 9-12)**One-Half Credit****Prerequisite: None**

Description: Students will define manufacturing as the processing of raw materials to produce products to meet the needs and wants of people. The students will design, produce, and market a simple product. Technology in all phases of manufacturing and marketing systems will be used. The Universal Systems Model will be used to improve all phases of the manufacturing process. This course will utilize a multi-disciplinary teaching approach by working with the Art, Science, and Business departments. Problem solving, troubleshooting, critical thinking, and teamwork will be incorporated into the course.

ADVANCED MANUFACTURING SYSTEMS (Grades 10-12)**One Credit****Prerequisite: Manufacturing Systems**

Description: This course offers students the opportunity to learn advanced material processing techniques. Metalworking, woodworking, and C.N.C. equipment will be used. Throughout the course students will work on a variety of advanced projects and with a variety of materials, including ferrous and non-ferrous metals, wood, and polymers.

ENERGY AND CONTROL SYSTEMS (Grades 9-12)**One-Half Credit****Prerequisite: None**

Description: In this course students will develop a basic understanding of transportation technology. Through problem solving activities, students will develop, produce, use, and assess vehicles used to transport people and freight. They will also study the technological subsystems of propulsion, structure, guidance, control and support in land, water, air, and space environments.

CIRCUIT ANALYSIS (Grades 9-12)**One-Half Credit****Prerequisite: None**

Description: This course will introduce students to the fundamental techniques and application of electronics. The course activities will include: The performance of transformers, capacitors, resistors, inductors, digital electronics, and circuit analysis. This will be accomplished by simulating circuits using computer software and hands-on circuit building. A final project will incorporate all concepts the students learn in the course. Students will work in groups for the purpose of developing problem-solving skills.

COMPUTER INFORMATION SYSTEMS PATHWAY



2022 – 2023 school year

Recommended Sequence	Course	No. of Credits
9	Introduction to Java Programming	.5
9	Introduction to Python Programming	.5
11-12	Introduction to JavaScript	.5
10-12	Networking	1
10-12	AP Computer Science Principles	1
10-12	AP Computer Science Principles A	1

INTRODUCTION TO JAVA PROGRAMMING (Grades 9-12)**One-Half Credit****Prerequisite:** Grade of 90 or above in Algebra IB or Algebra I

Description: This introductory-level course is designed for students who have very little programming experience. Students will design object-oriented applications with Java and will create Java programs using hands-on, engaging activities such as calculating bill, tip, and tax calculations and temperature conversion programs. Students also learn the techniques of Java and how Java can be used in cross-platform programming. At the end of the course, students are able to write basic programs using Java and are prepared to pursue further instruction in any programming language.

INTRODUCTION TO PYTHON PROGRAMMING (Grades 9-12)**One-Half Credit****Prerequisite:** Grade of 90 or above in Algebra IB or Algebra I or teacher recommendation

Description: This course introduces first-time programmers to the Python programming language. Through projects, students will learn a basic understanding of the rules and grammar used in programming in Python. A final project with drone construction will showcase their problem-solving and programming skills.

INTRODUCTION TO JAVASCRIPT & GAME DEVELOPMENT (Grades 11-12)**One-Half Credit****Prerequisite:** Algebra I or Algebra IB or teacher recommendation

Description: This class will provide students with their first introduction to a text-based programming language as well as text-based language application. Through gaming, this course introduces first-time programmers to the JavaScript programming language. By the end of the course, students will have developed the ability to program in JavaScript. Two final application projects, one in a completed game design and one completed interactive website will showcase their problem-solving and programming skills with this language.

NETWORKING (Grades 10-12)**One Credit****Prerequisite:** None

Description: Students will learn computer network fundamentals such as: network classifications, cabling, server operating systems, protocols, and computer maintenance. The class will consist of lecture, Internet-based curriculum and hands-on activities. Students will also have the option of building their own computer as one of the course projects. This course is essential for students who are interested in pursuing careers in computer fields.

AP COMPUTER SCIENCE PRINCIPLES (Grades 10-12)**One Credit****Prerequisite:** Algebra I**Preferred:** *Networking & Introduction to Programming*

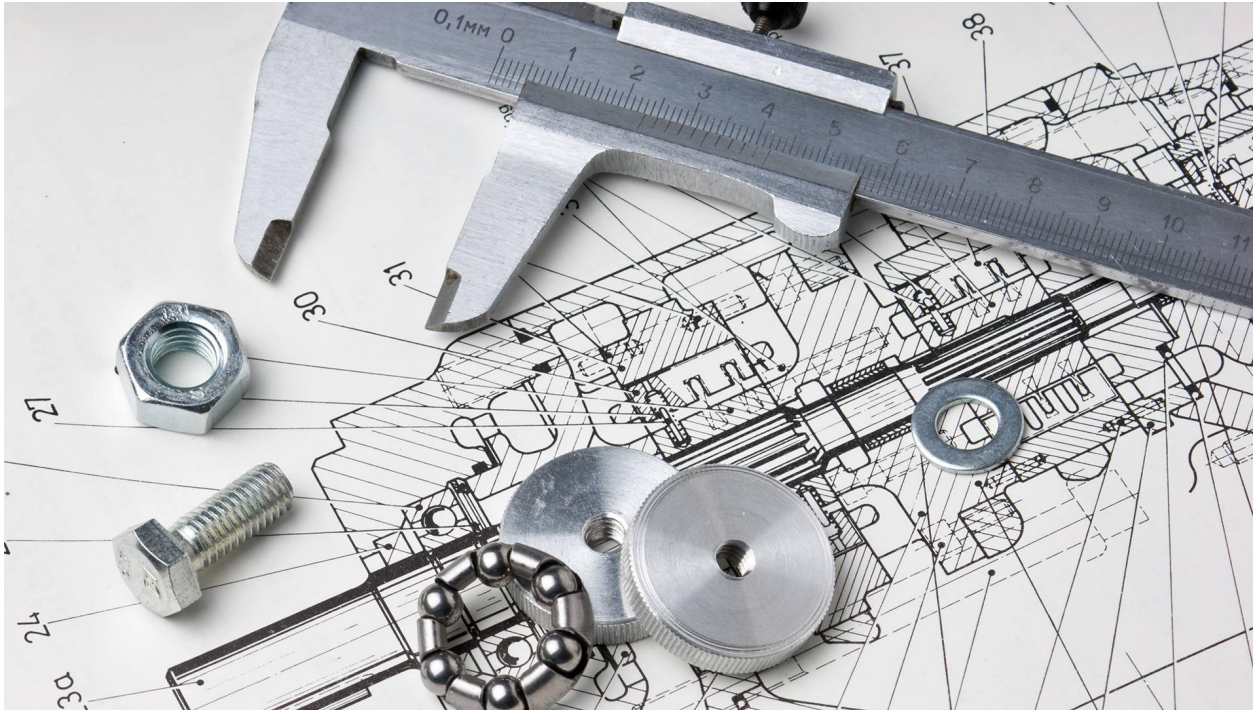
Description: This course consists of an object-oriented programming methodology with an emphasis on problem solving and algorithm development. This course is meant to be taken in preparation for the AP CSP exam. Scratch and Python programming will be used to develop computational thinking skills used to analyze and study data and work with large data sets to analyze, visualize, and draw conclusions from trends.

Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

AP COMPUTER SCIENCE PRINCIPLES A (Grades 10-12)**One Credit****Prerequisite:** Introduction to Java Programming and teacher recommendation

Description: *AP Computer Science Principles A* builds on the Introduction to Programming class. This project-based course teaches students deeper aspects of the Java programming language and gives students the skills to create programs for real world solutions. Topics include problem solving, design strategies and methods, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. This course is meant to be taken in preparation for the *AP Computer Science A* exam. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

ENGINEERING PATHWAY



Recommended Sequence	Course	No. of Credits
9	Design and Development	.5
9/10	Circuit Analysis	.5
10	Mechanical Engineering I	1
11	Mechanical Engineering II	1
12	Robotics	1

INTRODUCTION TO DESIGN & DEVELOPMENT (Grades 9-12)**One-Half Credit****Prerequisite: None**

Description: Students will explore a variety of technological systems and work on Computer Aided Drafting and Design projects as well as hands on projects. They will use a variety of hand and power tools to create their projects. The majority of the class work is hands-on-learning where projects start using the latest release of "AutoCAD". Any student who has a career interest in engineering, design, building, construction, or manufacturing will find this course valuable.

MECHANICAL ENGINEERING DESIGN I (Grades 10-12)**One Credit****Prerequisite: Introduction to Design & Development**

Description: This course will integrate math, science, and technology skills into the design process. The course will be split into two portions, the first being creative work done with parametric modeling software. The students will model parts and solve problems using current industry standard software. The second portion of the course will be hands-on activities involving Robot kits, a C.N.C Lathe, Mill, Router, and a Robotic Arm will be used. These activities will lead to students building projects they design in class.

MECHANICAL ENGINEERING DESIGN II (Grades 11-12)**One Credit****Prerequisite: Introduction to Design & Development and Mechanical Engineering Design**

Description: The trend in industry is to apply computer aided 3D modeling techniques to solve manufacturing problems with the incorporation of automation. Students will be learning to use Autodesk Inventor and Pro Engineer to create parts, assemblies, drawings, and animations to create real life examples of robotics. The student will then be designing and constructing small scale robots to meet the First Vex Robotics challenge.

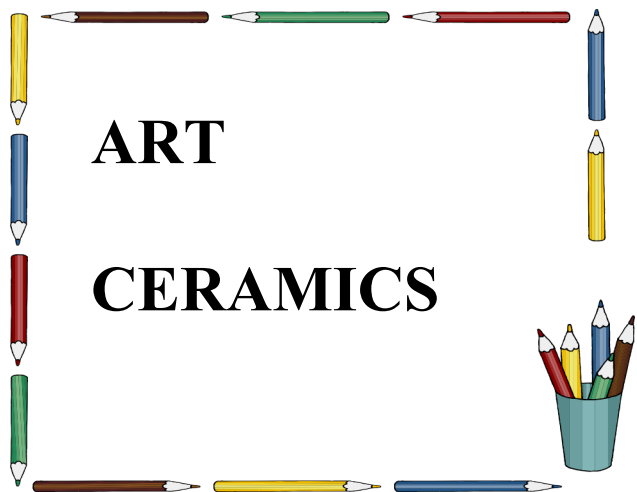
ROBOTICS (Grade 12)**One Credit****Prerequisite: Mechanical Engineering Design II**

Description: With curriculum provided by Carnegie Mellon University and their National Robotics Engineering Center, the students will program several autonomous robots using Robot C and Robot G. There will be class competitions and engineering challenges using the radio controlled VEX robotic system, smart phones with BLUETOOTH, and the Arduino Boards. Careers in robotics, programming, and engineering will be discussed. This course will allow students that have taken the Mechanical Engineering Design II course to be team captain of one of the VEX teams. Students will assist the 1st year students with the design, construction, and programming of their competition VEX Robots.

This course will be used as a capstone course designed for the students to utilize all of their knowledge to design and construct their own automated system. Students will present their design at the end of the year revolving around a theme agreed upon by the student, their parents, and the instructor.

ARCHITECTURAL DESIGN SYSTEMS (Grades 10-12)**One Credit****Prerequisite: Introduction to Design & Development**

Description: This course will focus on the process of design and representation of residential dwelling. Skills learned in prerequisite classes will be used to design and create the various drawings necessary to build houses. A major part of this course will be research, designing, and drawing the plans for a residential structure. The course will also take a look into current design trends incorporating them throughout.



SCULPTURE I (Grades 10-12) (Pending Board Approval)
Prerequisite: Crafts or Studio Art I

One-Half Credit

Description: This introductory course is meant for students who enjoy 3-dimensional design and creation of objects meant to be viewed in the round. During this course students will explore many different types of sculptural mediums including paper, cardboard, wire, fabric, and clay. Students will learn the difference between functional and non-functional sculpture to create 3-dimensional works via demonstration, inquiry methods, and hands-on experimentation with various sculptural techniques.

CRAFTS (Grades 9-12) (Pending Board Approval)

One-Half Credit

Description: This introductory course is meant for students who enjoy art but are not as interested in academic drawing and painting. This course will be primarily choice-based with the expectation of 4 major projects per semester from a choice-based menu of options including, but not limited to mosaic design, collage, weaving, embroidery, paper mache sculpture, paper quilling, altered books, assemblage, jewelry design and print making. Students will learn via demonstration, inquiry methods, and hands-on experimentation with various crafting techniques.

STUDIO ART I (Grades 10-12)

One-Half Credit

Description: This is a first year introductory course, a prerequisite to be taken before other art courses. Students of all skill levels are welcome. This course provides experiences with general art and design concepts. Students will explore a wide range of artistic concepts through hands-on art activities, including creativity, design, art history, and basic art theory.

STUDIO ART II (Grades 10-12)

One-Half Credit

Prerequisite: Studio Art I

Description: Students who have successfully completed Art I are welcome to take this course. This course provides experiences with a wider range of materials such as watercolor, acrylic, linoleum block carving and printmaking. In addition to learning advanced techniques, students will continue to gain experience with materials such as watercolor, acrylic, linoleum block carving and printmaking, etc. Using these materials, students will learn about the elements and principles of art in greater depth. Lessons in art history and aesthetics will continue.

DRAWING AND PAINTING (Art III) (Grades 10 - 12)

One Credit

Prerequisite: Studio Art I and Studio Art II or an instructor's recommendation.

Description: Using the foundational knowledge from previous courses, the student will continue to gain experience with drawing and painting media. Students will continue to develop their skills with drawing and painting materials.

ADVANCED DRAWING AND PAINTING (Art IV)

One Credit

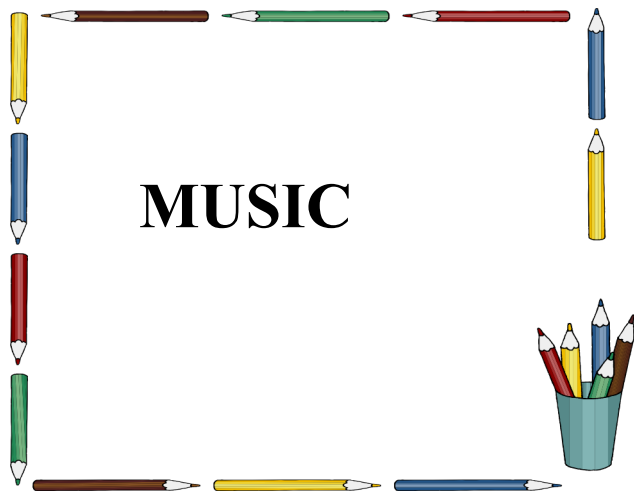
Prerequisite: Studio Art I & II and Drawing and Painting, or an instructor's recommendation.

Description: Studio Art I & II and Drawing and Painting, or an instructor's recommendation.

Description: Advanced Drawing and Painting is primarily for those in grade 12 who have completed all previous art electives. A portfolio of work will be assembled. This course is designed for the serious art student, especially those who plan to major in art in college. Projects will be of an advanced nature allowing for an individual approach.

NOTE: Students who schedule this course have the opportunity to earn three college credits through Keystone College. For specific information about college credits, refer to pages 10 and 11 of this catalog.

ADVANCED ART (Grade 12)**One-Half or One Credit****Prerequisite:** Studio Art I & II, Drawing & Painting, and Advanced Drawing & Painting, or an instructor's recommendation.**Description:** Advanced independent study for 12th grade art students. Students will set personalized goals to demonstrate proficiency in application of technique, composition, in the genre, media, and techniques of their choice. Students will assemble and present a portfolio of work in which they demonstrate competency in design and craftsmanship.**INTRODUCTION TO CERAMICS (CERAMICS I) (Grades 10 - 12)****One-Half Credit****Description:** This course not only provides experiences for hand-built projects, but provides an introduction throwing cylinders. Pottery students will create projects using a variety of techniques such as slabs, coil building, and pinch pots. Popular items created include boxes whistles, lanterns, and bowls.**ADVANCED CERAMICS I (CERAMICS II) (Grades 10 - 12)****One-Half Credit****Prerequisite:** Intro to Ceramics**Description:** This course will give students an opportunity to further develop their skills in slab and coil forms. In Ceramics II students will expand their creativity with an emphasis on craftsmanship and imagination. Students will continue to advance their throwing skills and create forms on the pottery wheel. Projects include mugs, bowls, and more. This class will also give students the opportunity to develop their own projects with teacher guidance. *The materials fee for this course is \$25.00.***ADVANCED CERAMICS II (CERAMICS III) (Grades 10 - 12)****One-Half or One Credit****Prerequisite:** Intro to Ceramics and Advanced Ceramics I**Description:** Study and develop ceramics goals based upon structured inquiry. Explore ceramic topics and techniques of interest in order to further develop quality and craftsmanship in functional, decorative, and production areas of ceramics. "S.M.A.R.T." Specific, Measurable, Attainable, Relevant, and Time Specific goals will be written by individual students studying hand-built or wheel thrown techniques. Ceramics teacher will approve, scaffold, monitor, and guide students' choice based projects. Examine, apply, and critique "Artist Habits of the Mind" (Develop Craft, Engage and Persist, Envision, Express, Observe, Reflect, Stretch and Explore, and Understand the Art World) as students strive to achieve individualized ceramics goals.



MUSIC THEORY I (Grades 10-12)**One-Half Credit**

Description: This course is an introduction to music theory, covering the basics of music notation and composition. You do not have to read music to take this course, however, it is recommended that you have a strong musical background.

MUSIC THEORY II (Grades 10-12)**One-Half Credit**

Description: To enroll in this class, students must have a strong background in reading music or have completed Music Theory I. The course focuses on analyzing music, ear training, musical dictation, and music composition.

AP MUSIC THEORY (Grades 11 and 12)**One Credit**

Prerequisite: Music Theory II (or successful completion of required exam)
(Students taking AP courses are expected to maintain a minimum grade of 77%.)

Description: This course is available to students who have completed the prerequisite Music Theory I and II with a final grade average of C or above, or receive special permission by taking an entrance exam. The course is devoted to the study of advanced theory through extensive musical analysis, identification, and writing. Quite simply, the course is for those students who are interested in developing their musical skills beyond the average level and who intend to take the AP Music Theory examination. This course meets for the entire year. Students who opt to take the AP exam will pay \$25.00 towards the College Board testing fee. Financial assistance is available for those who need it.

MARCHING BAND 10, 11, AND 12**One-Half Credit**

Description: The high school marching band performs at football games, parades, competitions and other community events throughout the year. The marching band starts rehearsals over the summer and continues until the end of the football season with the addition of the Memorial Day and July 4th parades. Students will expand their knowledge of basic marching techniques, conducting, designing shows, writing marching drill, and leadership skills. Students may also choose to participate with the band as baton twirlers, rifle squad, color guard, or flag squad. Students are required to attend two weeks of band camp in the summer, regular after school rehearsals, and ALL performances. One year (not including 8th grade) of marching band is required to participate in concert band. Exceptions may be granted for students who participate in a school sponsored fall sport (soccer, football, volleyball, cross country, or golf).

CONCERT BAND 10, 11, AND 12**One-Half Credit**

Description: The concert band rehearses during the day and has performances throughout the year. Students enrolled in concert band perform music from a variety of periods and styles. Students will expand their knowledge of basic theory and historic relevance of the literature they perform. Students are required to attend all rehearsals, performances, and attend weekly group lessons. Students in concert band will also have the opportunity to make up the woodwind, brass, and percussion sections of the Orchestra during the spring semester. To participate in concert band, students must participate in marching band in their first year of band at the high school. Exceptions may be granted for students who participate in a school sponsored fall sport (soccer, football, volleyball, cross country, or golf).

MODERN BAND 10, 11, AND 12**One-Half Credit**

Description: The Modern Band is a performance-based class exploring contemporary popular music of the last 50 years. The course will introduce and build skills necessary to play electric guitar, acoustic guitar, electric bass, keyboard, drums, and vocals. Students will explore a variety of popular genres, such as pop, rock, hip-hop, R&B, electronic dance music, and other contemporary styles. Many styles of music will be discussed, demonstrated, and performed by the students. The class will also include improvisation, composition, basic music theory, and the use of technology in the recording studio. No experience is necessary but may be beneficial.

JAZZ BAND 10, 11, AND 12

One-Half Credit

Description: Jazz Band is the most select instrumental group at Athens Area High School. Jazz Band members are chosen by the director's recommendation and audition only. Students who audition for Jazz Band must be members of the concert band, marching band, or orchestra. Emphasis is placed on improvisation techniques and performing a variety of standard charts from pop, show, and jazz styles. This select ensemble requires a high degree of dedication, time and work from each member. The Jazz Band performs at all instrumental concerts at the high school and other local events throughout the spring semester. Membership is limited to 16-20 members. The ensemble meets every day during the school day during the spring semester and from one to three times a week after school.

STRING ORCHESTRA 10, 11, AND 12

One-Half Credit

Description: The String Orchestra is comprised of string players in grades 9, 10, 11, and 12 who rehearse every other day throughout the school year. The String Orchestra strives to give its members the experience of playing orchestral literature from a variety of composers and styles that will enhance their playing technique and musical knowledge. Students are required to attend a sectional rehearsal once a week in which they will work on string technique, solos, and orchestral music. String Orchestra members will also make up the string section of the Symphony Orchestra during the spring semester with select band students making up the wind and percussion sections. The String Orchestra performs at the winter and spring concerts at the high school and at other community functions.

Please Note: Students who participate in both band and orchestra will receive one combined credit.

CONCERT CHOIR 10, 11, AND 12

One-Half Credit

Description: The Concert Choir is open to any interested high school student and strives to give its members the experience of singing choral literature from a variety of composers and styles that will enhance the members' singing technique and musical knowledge. Members will learn vocal wellness and the care of their vocal instrument. Concert Choir performs at all high school vocal concerts and selected other concerts throughout the year. Concert Choir rehearses every other day during the school day and from two to three times per semester after school.

REFLECTIONS (Show Choir) 10, 11, AND 12

One-Half Credit

Description: Reflections is the most select choral group at Athens Area High School. Reflections members are chosen by the director's recommendation and audition only. Students who audition for Reflections must be members of Concert Choir. Emphasis is placed on performing a variety of choral literature and choreography from the pop, show, and jazz styles. This select ensemble requires a high degree of dedication, time, and work from each member. Reflections perform at all vocal concerts at the high school and for many civic and social clubs throughout the year. Membership is limited to 16-25 members. The ensemble meets every other day during the school day and from one to three times a week after school.

MUSIC TECHNOLOGY I (Grades 10-12)

One-Half Credit

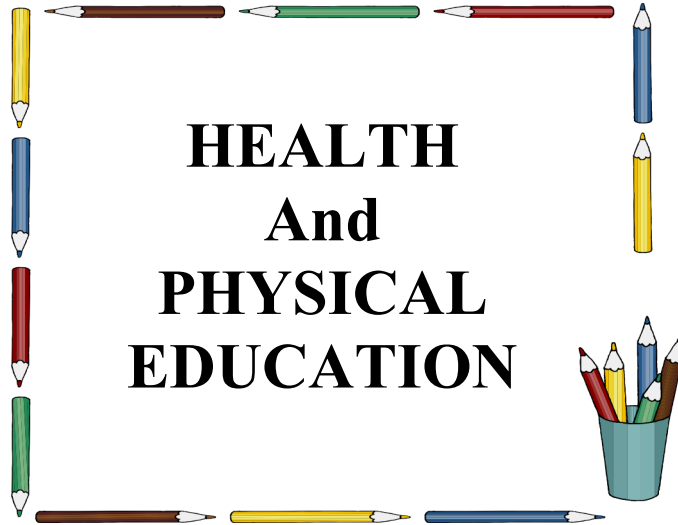
Description: This course is an introduction to music technology, covering the basics of live and recorded music production. This hands-on, project-based course teaches how to set up, use, and maintain mics, mixers, speakers for live stage performance, and the fundamentals of working in a recording studio. You do not have to read music or play any instruments to take this course.

MUSIC TECHNOLOGY II (Grades 10-12)

One-Half Credit

Prerequisite: Music Technology I Description: This course expands on recording and editing techniques from Music Technology I. This course also explores the history of music technology, careers in music technology, introduces MIDI, and sound design practices for cinema and television.

**HEALTH
And
PHYSICAL
EDUCATION**



PHYSICAL EDUCATION – WELLNESS (Grade 10)

One-Half Credit

Description: In tenth grade physical education, students will know, demonstrate, apply, and analyze the importance of leading a life that will reflect exercise, nutrition, healthy choices, and personal acceptance. The course content will comprise of the knowledge, development and implementation of a Personalized Fitness Plan.

PHYSICAL EDUCATION – LIFETIME ACTIVITIES (Grade 11)

One-Half Credit

Description: In eleventh grade physical education, students will have the knowledge to develop and implement a Personalized Fitness Plan. In addition, they will assess and use strategies for enhancing adult group interaction in physical activities. They will accomplish this through individual and team based activities that promote a healthy life.

PHYSICAL EDUCATION – LIFETIME FITNESS (Grade 11)

One-Half Credit

Description: In eleventh grade physical education, students will have the knowledge to develop and implement a Personalized Fitness Plan. In addition, they will assess and use strategies for enhancing adult group interaction in physical activities. They will accomplish this through low impact individually based activities that promote a healthy lifestyle.

PHYSICAL EDUCATION - STRENGTH TRAINING AND CONDITIONING (Grade 12) One-Half Credit

Description: This elective course is intended for the student who is interested in learning more about strength training, conditioning, fitness and nutrition management. The course will provide a look into the professional careers that a student can pursue in these areas. Students will take an in-depth look at strength training and conditioning programs, and will write and use his/her own program; they will also study and create nutrition plans that are appropriate for their selected strength training and conditioning programs. The class will also have an opportunity for games and sport related activities.

SCHOOL-TO-WORK

Grades 11 & 12

Up to Two Credits

Description: In conjunction with the Northern Tier Industry and Education Consortium (NTIEC) and local employers, Athens Area High School students are able to earn credits towards graduation while working part-time during the school year.

Students with part-time jobs during the school year are able to complete an application and register with the NTIEC, whose representative works with local employers to supervise and evaluate each student's work performance. Student evaluations are based on such things as attendance, following safety regulations, dependability, proficiency/quality of work, initiative, teamwork, and professionalism. Marking period grades are assigned and final averages are included in the student's overall GPA. Credit values are awarded based on the average number of hours worked per week.

Students are permitted to participate in the program for one or two school years, earning a maximum of 4 elective credits.

This class is scheduled independently of the traditional process. It will not be listed with a course number on the Course Selection Form, and students should not include School-To-Work on their Course Selection Form. To enter the School-To-Work Program, a student should meet individually with his/her school counselor during the summer or at the start of the school year to initiate the application/registration process. It is the student's responsibility to secure employment before entering the program.

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CAREER CENTER

**Students who enroll in the Northern
Tier Career Center must have
completed 13 credits by the end of the
2023-2024 school year.**



The Students Occupationally & Academically Ready (**SOAR**) Program is a Pennsylvania Department of Education approved, Career & Technical Education Program of Study that credits skills and tasks learned at the secondary school (high school) level to a postsecondary (college) degree, diploma or certification program. SOAR programs prepare today's students for High Priority Occupations which are tomorrow's high demand and high wage careers. Students in SOAR programs may qualify for **FREE** college credits at institutions in PA.

<https://www.education.pa.gov/K-12/Career%20and%20Technical%20Education/Programs%20of%20Study/Pages/default.aspx>

Penn College Dual Enrollment is offered through Pennsylvania College of Technology and allows students to earn college credits in NTCC programs at **no cost** to them.

<https://www.pct.edu/k12-educators/penn-college-dual-enrollment>

TEACHER ACADEMY/EARLY CHILDHOOD EDUCATION

TEACHER ACADEMY/EARLY CHILDHOOD EDUCATION – 900 Hours 4 Credits

This program provides instruction in the physical, emotional, intellectual, and social development of children. Aspects of teaching and working with children from birth to elementary school age are included, such as health, wellness, safety, growth, behavior, and developmental milestones. Students will learn to attend to children's basic needs, organize activities, develop curriculum, prepare lesson plans, design and manage programs, and effectively deliver instruction in childcare, pre-school, and elementary settings. Theory in this course includes human development, psychology, ethical and professional responsibilities, communication, and the interaction of child, family, community, and schools. Students will participate in clinical experiences at schools and childcare centers and operate the Little Learners Pre-School Laboratory at NTCC to develop the skills necessary to become successful future teachers and childcare providers while working directly with young children.

Industry Credential Opportunities:

American Red Cross: Community first Aid & Safety, Infant & Child CPR, AED Essentials

University of Pittsburgh: Act 31 Mandatory Reporter

Penn State Extension: Get Started with Center-Based Care

College credit opportunities: Dual enrollment opportunities in progress

CONSTRUCTION TRADES

BUILDING CONSTRUCTION TRADES - 900 hours 4 Credits

This program of study covers construction and remodeling of buildings including carpentry, concrete, masonry, painting, drywall, cabinetry, roofing, plumbing, electrical, stairs, and interior/exterior finishes. Students study and practice all phases of building construction, from layout of site, foundation and wall construction, to roof framing and interior trim.

Industry Credential Opportunities:

OSHA: 10-hour Safety Course, Construction

National Safety Council: Forklift Operator Certification

Penn College Dual Enrollment: BCT 103, 109 & 234 (10 credits offered)

MECHANICAL TRADES (HVAC-Plumbing-Electrical) - 900 hours 4 Credits

This Heating, Ventilation & Air Conditioning (HVAC) program combines classroom and practical learning experiences and prepares individuals to apply technical knowledge and skills to install, repair, and maintain home and business heating, air conditioning, basic plumbing, electrical, and refrigeration systems. Students will gain experience by working on equipment that is used daily in their own homes, such as furnaces, water heaters, electrical appliances, and air conditioning units.

Industry Credential Opportunities:

OSHA: 10-hour Safety Course, Construction

Mainstream Engineering: EPA 608

National Safety Council: Forklift Operator Certification

American Ladder Institute: Single & Extension Ladder, Step Ladder

Penn College Dual Enrollment: ACR 111 (5 credits offered)

HEALTH CARE

HEALTH ASSISTANT/PRE-NURSING - 900 hours



4 Credits

This course allows the student to advance at their own rate and allows for individuality in the choice of a specific career objective and provides skills for Medical Assistant, Nursing Assistant, and Dental Assistant. Introduction to EKG, Phlebotomy, Occupational and Physical Therapies are included. This course is for the student looking to further their education in health care as a Registered Nurse, LPN, OT, PT and other health care related fields. After completion of the nursing assistant curriculum, students are eligible to take the state exams (written & skill) for placement on the registry for long-term care nursing assistants. Clinical experiences may accompany portions of this course.

Industry Credential Opportunities:

Pennsylvania Department of Health: Nurse Aide Registry

American Red Cross: Community First Aid and Safety, AED Essentials

DVM-Instructional Systems: Dean Vaughn Learning Systems in Medical Terminology

PA Department of Human Services: Personal Care Home Direct Care Staff

Penn College Dual Enrollment: MTR 104 (3 credits offered)

HOSPITALITY

FOOD PRODUCTION & MANAGEMENT - 900 hours



4 Credits

This course is designed to provide the student with the skills, knowledge, and attitudes necessary in food service and hospitality related careers. Specialized learning units include theory and work experience in the major areas of selection, purchasing, storage and preparation of ingredients, baking and desserts, restaurant management, and cold food preparation. The restaurant kitchen serves as the preparation laboratory, while the 40-seat restaurant provides experience in proper front-of-the house operations.

Industry Credential Opportunities:

National Restaurant Association: ServSafe Manager Certification

ServSafe : Allergen Certification, Food Handler Certification

Penn College Dual Enrollment: FHD 118 & FHD 137 (4 credits offered)

HUMAN SERVICES

COSMETOLOGY - *1350 hours (Tech Prep)

4 Credits

This is a state licensed course designed to provide the student with fundamentals needed to prepare for the state board examination. Instruction is provided in chemical textures, hair coloring and lightening techniques, haircutting and hair design, microdermabrasion, glycolic peels, facials, superfluous hair removal, styling eyebrows, pedicures, manicures, and nail art. Practical experience is gained by providing services through the operation of an on-site clinic for classmates, fellow NTCC students, and clients from the community.

Industry Credential Opportunities:

Pennsylvania State Board of Cosmetology: Cosmetologist

*1250 hours are required by the Pennsylvania State Board of Cosmetology to take the State Board exam. In order to obtain sufficient hours, students will need to enroll in their **10th grade year**. Summer school is no longer offered for completion of hours.

INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY - 900 hours



4 Credits

This program prepares students to apply basic engineering principles and technical skills as they take the first step in pursuit of an IT career in cloud computing, network administration, mobility, security systems administration, programming, database management, and/or continuing education at a post-secondary institution. Taking a broad-spectrum approach, students will learn basic computer design and maintenance, security, networking, operating systems, IT operations, hardware and software problem diagnosis, troubleshooting, technical support, and web design. Students will gain the foundational knowledge and skills necessary to successfully pursue the post-secondary training and education that is required for most entry-level positions in IT.

Industry Credential Opportunities:

Computing Technology Industry Association (CompTIA): IT Fundamentals, A+ Certification

Test Out: IT Fundamentals Pro, PC Pro

Penn College Dual Enrollment: EET 145 (4 credits offered)

MANUFACTURING

MACHINE TOOL TECHNOLOGY - 900 hours

4 Credits

The MTT program is designed to prepare students with the skills and experience necessary to pursue post-secondary education and training in machining and engineering pathways or obtain entry level employment in the metal products or manufacturing industry. Students will be trained in the conventional areas of industrial machine setup, operation, and maintenance, to include lathes, mills, drills, and grinders, as well as in Computer Numerical Control (CNC) machine setup, programming and operation. Students will develop skills in industry-related mathematics and CAD/CAM software applications, in addition to the use of tools, gauges, precision instruments, and blueprints. Machinists are in exceptionally high demand and the field includes careers in engineering, manufacturing, machine maintenance, tool and die, and fabrication.

Industry Credential Opportunities:

National Institute for Metalworking Skills, Inc. (NIMS): 11 Certifications Available

CareerSafe: OSHA: 10-hour Safety Course

National Safety Council: Forklift Operator Certification

Penn College Dual Enrollment: MTT 118 & MTT 119 (8 credits offered)

WELDING TECHNOLOGY - 900 hours

4 Credits

The Welding program is taught in a simulated work environment to help develop the hands-on experience, as well as theory and equipment and shop safety skills. The course is designed to equip students with skills and knowledge in shielded metal arc welding (SMAW), gas metal arc welding (GTAW), and flux core arc welding (FCAW), as well as blueprint reading and fabrication.

Industry Credential Opportunities:

American Welding Society: Level 1 Entry Welder Training

CareerSafe: OSHA: 10-hour Safety Course

National Safety Council: Forklift Operator Certification

Penn College Dual Enrollment: WEL114, WEL116, WEL120, WEL123, WEL124 & WEL129 (12 credits offered)

TRANSPORTATION

AUTOMOTIVE MECHANICS TECHNOLOGY - 900 hours

4 Credits

This program prepares individuals to apply technical knowledge and skills to the specialized area of automotive technology including engine diagnosis, engine repairs, heating & cooling systems, power train, brake suspension, steering systems, and computerized engine controls. Students study and practice all phases of engine repair and overhaul from diagnosis-problem solving to preventative maintenance.

Industry Credential Opportunities:

Pennsylvania Department of Transportation: Certified Safety Inspector Cat I, Cat II, Cat III

Mobile Air Conditioning Society Worldwide: Section 609 Certification for Refrigerant Recycling & Recovery

S/P2: Safety & Pollution Prevention, Automotive

Valvoline: Motor Oil Certification

National Safety Council: Forklift Operator Certification

COLLISION REPAIR TECHNOLOGY - 900 hours

4 Credits

This program prepares individuals to apply technical knowledge and skills to the specialized areas of automotive reconstruction and restoration including panel replacement and repair, frame repair, plastic repair, refinishing, auto body related mechanics, automotive electricity, and estimating. Students study and practice all methods of auto body repair including the use of hand tools, welding practices, body and frame repair, refinishing processes, spray painting techniques, interior trim removal, upholstery, weather stripping, sheet metal repair, filler work, and plastic repair.

Industry Credential Opportunities:

Pennsylvania Department of Transportation: Certified Safety Inspector Cat I, Cat II, Cat III

Environmental Protection Agency: 6H Certification

ICAR: Non-Structural (14 certifications available)

National Safety Council: Forklift Operator Certification

DIESEL MECHANICS TECHNOLOGY - 900 hours

4 Credits

This program prepares individuals to apply technical knowledge and skills to the specialized maintenance and repair of trucks, buses, and other commercial and industrial vehicles. Instruction in diesel engine mechanics, suspension and steering, brake systems, electrical electronic systems, preventative maintenance inspections, drive trains, HVAC systems, and auxiliary equipment installation and repair is included.

Industry Credential Opportunities:

Pennsylvania Department of Transportation: Certified Safety Inspector Cat I, Cat II, Cat III

Bendix: Brake Certification; MGM: Brake Certification

Valvoline: Motor Oil Certification

Mobile Air Conditioning Society Worldwide: Section 609 Certification for Refrigerant Recycling & Recovery

National Safety Council: Forklift Operator Certification

Penn College Dual Enrollment: DSM 119 & DSM 141 (4 credits offered)

Carl D. Perkins Act – Funding provided by the Carl D. Perkins Act allows NTCC to provide services to all students with an emphasis on providing services to students of special populations.

<http://www.education.pa.gov/K-12/Career%20and%20Technical%20Education/Perkins/Pages/default.aspx>

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**For additional details & program overview video, visit www.ntccschool.org.
Download the Northern Tier Career Center app for free!**