# COURSE DESCRIPTIONS <br> 2023-2024 <br> PENNS MANOR <br> AREA <br> JR./SR. HIGH SCHOOL 

This course description book contains a list of courses offered at Penns Manor Area Jr./Sr. High School. Following each course title is a brief description of the course and prerequisites. Each course is one school year in length and worth one credit unless noted. The courses are grouped by Language Arts, Math, Science, Social Studies, PE/Health, and Electives. The course descriptions will be revised each year during the month of January.

Students should use the course description book when selecting courses for scheduling purposes. Courses should be selected based on the student's career objective and interest each school year in March for the following school year.

Students may obtain Indiana Career and Technology Center program descriptions from the guidance office.

Any question in regard to a course should be directed to a guidance counselor or a teacher in the department in which the course is taught.
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## LANGUAGE ARTS

## English/Language Arts 6

Grade: 6
Credit: 2 (Two class periods)
In this course, students study the Wit and Wisdom curriculum to practice speaking, listening, reading, and writing. Traditional rules of grammar are stressed, and there is an emphasis on paragraph and sentence structure within Text Dependent Analysis responses. Literature studied covers the forms of poetry, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Writing practice will cover narrative, argumentative, and informative skills to prepare for the responses on the PSSA ELA. Review and practice address the Pennsylvania Core standards and assessment anchors to prepare students for the PSSA ELA test.

## English Language Arts 7

Grade: 7

English Language Arts (ELA) is designed as a developmental reading and writing class focusing on learning through novels, short stories, plays, nonfiction articles, and poetry through the implementation of the Wit \& Wisdom Learning Curriculum. Study of writing includes argumentative, narrative, and informational essays, research writing, and text-dependent analysis. Review and practice address the Pennsylvania core standards for English language arts and assessment anchors to prepare students for the English Language Arts PSSA. In addition, close reading, annotation, text-dependent analysis, and literacy terms are stressed. Close reading strategies are emphasized as a way to encourage successful comprehension during independent reading. Literacy terms and academic vocabulary study expose students to the language of the questions on the PSSAs as well as prepare them for independent reading. Textual analysis plays a major role in this course, and students spend time examining texts closely to find evidence. The objectives of this course are to increase vocabulary, improve comprehension of written text, encourage analytical thinking while reading and writing, and to develop an interest in different types of literature.

## Library Skills 7

The students will be introduced to various software programs, including Google Apps for Education. They will learn to use the digital and print research resources that the library/school district provides. Students will also explore issues of internet safety, media use, digital citizenship, educational technology and 3D printing/CAD software.

Writing and Speaking 7
Grade 7

Credit 0.5
Writing and Speaking 7 is a semester course for 7th-grade students that incorporates skills in researching, writing, and presenting speeches. It also gives students practice in various forms of writing, with an emphasis on text-dependent analysis essays. In addition, guidelines for determining source credibility when completing research are taught and practiced. The goals of the course address the Pennsylvania Core Standards in English Language Arts.

Language Arts 8
Grade 8
Credit: 2 (two class periods)
In this course, students study the Wit and Wisdom curriculum to practice speaking, listening, reading, and writing. Traditional rules of grammar are stressed, and there is an emphasis on paragraph and sentence structure within Text Dependent Analysis responses. Literature studied covers the forms of poetry, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Writing practice will cover narrative, argumentative, and informative skills to prepare for the responses on the PSSA ELA. Review and practice address the Pennsylvania Core standards and assessment anchors to prepare students for the PSSA ELA test.

## Writing 8

Grade: 8
Credit: 0.5

Writing 8 is a semester course for 8th-grade students that incorporates writing and grammar skills. This course gives students practice in various forms of writing, with an emphasis on text-dependent analysis essays. Academic vocabulary, traditional rules of grammar, paragraph and sentence structure, and essay organization are stressed. Review and practice address the Pennsylvania Core Standards in English Language Arts to prepare students for the PSSA English Language Arts test.

## Library Science 8

This course reviews the various software products, print resources, and digital resources that the students were introduced to in Library Skills 7, and explores these resources more fully. Students will also explore various STEM-related software.

## Language Arts 9

Language Arts 9 is a year-long required course. This course gives students practice speaking, listening, reading, and writing. Traditional rules of grammar, vocabulary, and spelling are stressed. Literature studied covers the forms of poetry, drama, short stories, essays, novels, and myths. Character analysis, plot structure, literary elements, and theme
will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Students will complete a variety of objective and short answer assessments. Review and practice address the Pennsylvania language arts standards and assessment anchors to prepare students for the Keystone Literature and Composition tests.

## Academic Language Arts 9

Prerequisites: Teacher recommendation and Proficiency on the PSSA

Academic Language Arts 9 is a year-long required course for students not taking Language Arts 9. This course gives students practice speaking, listening, reading, and writing. Traditional rules of grammar, vocabulary, and spelling are stressed. Literature studied covers the forms of poetry, drama, short story, essay, the novel, and myth. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice address the Pennsylvania language arts standards and assessment anchors to prepare students for the Keystone Literature and Composition tests. In addition, students will have more advanced assignments with a focus on college preparation and be expected to complete many assignments independently with some guidance.

## Honors Language Arts 9 1.2 Credits

Prerequisites: Teacher recommendation, Proficiency on the $8^{\text {th }}$ grade ELA PSSA, and completed summer assignments

This course gives students practice with speaking, listening, reading and writing. SAT-prep vocabulary units will be incorporated into the course as well as academic vocabulary. Literature studied covers the forms of poetry, drama, short story, essay, the novel, and myth. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Advanced writing assignments including the argumentative essay, literary analysis, and a research paper will be incorporated into the course as well. Review and practice address the PA Core Standards in ELA to prepare students for the Keystone Literature tests. In addition, students will have more advanced assignments with a focus on college preparation and will be expected to complete assignments independently with little guidance.

## Literature 10

This course gives students practice speaking, listening, reading, and writing. Traditional rules of grammar and academic vocabulary are stressed. There is an emphasis on paragraph and sentence structure. Literature studied covers the forms of poetry, drama, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice address the Pennsylvania Core Standards in English Language Arts to prepare students for the Keystone Literature test.

Prerequisites: Teacher recommendation and an average of $80 \%$ or higher in Academic Language Arts 9, or an average of 93\% or higher in Language Arts 9

This course gives students practice with speaking, listening, reading, and writing. Traditional rules of grammar and academic vocabulary are stressed. There is an emphasis on paragraph and sentence structure. Literature studied covers the forms of poetry, drama, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice addresses the Pennsylvania Core Standards in English Language Arts to prepare students for the Keystone Literature test. In addition, students will have more advanced assignments with a focus on college preparation.

## Honors Literature 10 1.2 Credits

Prerequisites: Teacher recommendation; an average of $80 \%$ or higher in Honors Language Arts 9, or an average of $93 \%$ or higher in Academic Language Arts 9; and completed summer assignments

This course gives students practice speaking, listening, reading, and writing. Traditional rules of grammar, vocabulary, and spelling are stressed. There is an emphasis on paragraph and sentence structure. Literature studied covers the forms of poetry, drama, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice address the Pennsylvania language arts standards and assessment anchors to prepare students for the Keystone Literature test. In addition, students will have more advanced assignments with a focus on college preparation and will be expected to complete a greater amount of independent assignments.

## Literature 11

This course explores various aspects of the English language, both written and spoken. It traces the development of American literature and how our nation's history and greatest writings have helped shape our world and influence students' lives today. Readings and discussions may include short stories, novels, plays, poetry, and nonfiction pieces by American authors. This course also focuses on both verbal and written communication skills. Writing, grammar, vocabulary, and research skills will be incorporated into the course as well. All assignments and activities are designed to address the PA Core Standards in ELA.

## Academic Literature 11

Prerequisites: Teacher recommendation and an average of $80 \%$ or higher in Academic Literature 10, or an average of $93 \%$ or higher in Literature 10, and Proficiency on the Keystone Literature test

This course explores various aspects of the English language, both written and spoken. It will trace the development of American literature and how our nation's history and greatest writings have helped shape our world and influence students' lives today. Readings and discussions may include short stories, novels, plays, poetry, and nonfiction pieces by American authors. This course also focuses on both verbal and written communication skills. SAT-prep vocabulary units will be incorporated into the course as well as academic vocabulary. There is an emphasis on writing various types of essays and a fully documented research paper. All assignments address the PA Core Standards in ELA. In addition, students will have more advanced assignments with a focus on college preparation.

## Honors Literature 11 1.2 Credits

Prerequisites: Teacher recommendation; an average of $80 \%$ or higher in Honors Literature 10, or an average of $93 \%$ or higher in Academic Literature 10, Proficiency on the Keystone Literature test, and completed summer assignments
*Dual Enrollment option available through Penn Highlands Community College for three credits.
PLEASE NOTE: This class is considered to be a college class. It is taught as a college class with an advanced pace and assignments are graded according to college guidelines.
This course explores various aspects of the English language, both written and spoken. It will trace the development of American literature and how our nation's history and greatest writings have helped shape our world and influence students' lives today. Readings and discussions may include short stories, novels, plays, poetry, and nonfiction pieces by American authors. This course also focuses on both verbal and written communication skills. SAT-prep vocabulary units will be incorporated into the course as well as academic vocabulary. There is extra emphasis on writing various types of essays and a fully documented research paper. All assignments address the PA Core Standards in ELA. In addition, students will have more advanced assignments with a focus on college preparation and will be expected to complete a greater amount of independent assignments. All students must complete the criteria for Penn Highlands English Composition I.

## Language Arts 12

Language Arts 12 is a required year-long course. This course focuses on communication skills important in the working world. The content includes workplace writing skills, drawn from real-world communications, and reading and speaking skills necessary for real-life success. Students will read a variety of short stories, novels, and plays to show an understanding of concepts learned throughout the students' high school careers. Traditional rules of grammar, vocabulary, and spelling are stressed. Group and individual projects incorporate cooperative learning and research skills. Review and practice address the Pennsylvania language arts standards and assessment anchors.

Academic Language Arts 12

Prerequisites: Teacher recommendation and an average of $80 \%$ or higher in Academic Literature 11, or an average of $93 \%$ or higher in Literature 11

This course focuses on language arts skills necessary for entry into a four-year college. In addition, students will practice speaking, listening, reading, and writing. Traditional rules of grammar, vocabulary, and spelling are stressed. Literature studied covers the forms of poetry, drama, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice addresses the Pennsylvania language arts standards and assessment anchors. Students will write two final papers, focusing on research and analysis, including responding to short answer essay questions on tests.

## Honors Language Arts $12 \quad 1.2$ credits

Prerequisites: Teacher recommendation with an average of $80 \%$ or higher in Honors Literature 11, or an average of $93 \%$ or higher in Academic Literature 11; and completed summer assignments
*Dual Enrollment option available through Mount Aloysius or Penn Highlands Community College for three credits

This rigorous course focuses on language arts skills necessary for entry into a four-year college. In addition, students will practice speaking, listening, reading, and writing. Traditional rules of grammar, vocabulary, and spelling are stressed. Literature studied covers the forms of poetry, drama, short story, essay, and the novel. Character analysis, plot structure, literary elements, and theme will be practiced while each piece of literature is reviewed. Group and individual projects incorporate cooperative learning and research skills. Review and practice address the Pennsylvania language arts standards and assessment anchors. In addition, students will have more advanced assignments and will be expected to complete a greater amount of independent assignments. Students will write two final papers, focusing on research and analysis, including responding to short answer essay questions on tests. Many of the assignments are independent with limited guidance.

## Foreign Languages:

## French I

Grade: 8-12
Prerequisite: C or better in $8^{\text {th }}$ grade English course Grade 8- upon teacher recommendation, must score proficient or advanced on PSSAs

This full-year course develops and provides students with listening, speaking, reading, and writing skills in the target language. The course contains three main areas of emphasis; vocabulary (numbers, time, food, shopping), grammar (present tense, simple future tense, interrogatives, regular and irregular verbs), and culture (French foods, cafes, school and family in France). The course goals are based upon the five foreign language standards. These goals are that the students (1) communicate in the target language, (2)
gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world.

Focuses on PA Standards 12.1, 12.3, and 12.5

## French II

Grade: 10-12
Prerequisite: C or better in French I
Dual Enrollment option available through Penn Highlands Community College for three credits.

This course continues to develop and provide students with listening, speaking, reading, and writing skills in the target language. The course contains three main areas of emphasis; vocabulary (body parts, clothing, jobs, household chores), grammar (past tense, reflexive verbs, direct object pronouns), and culture (French telephone and daily life in France). Students are encouraged to communicate in the target language. The course goals are based upon the five foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world

Focuses on PA Standards 12.1, 12.3, and 12.5

## French III

Grade: 11-12
Prerequisite: C or better in French II
Dual Enrollment option available through Penn Highlands Community College for three credits.

This full-year course is designed to further develop student skills in written and verbal communication in French. Emphasis is on oral communication and writing. Students are encouraged to communicate in French. The course is divided into three main areas of study; vocabulary (French foods and countries of the world), grammar (verb tenses past, imperfect, future, conditional, indirect object pronouns), and culture (study of French history, French cuisine, study of Paris and the metro system). The course goals are based upon the five foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world

Focuses on PA Standards 12.1, 12.3, and 12.5

## French IV

Grade: 12
Prerequisite: C or better in French III
This full-year course is designed to further develop student skills in written and verbal communication in French. Students are encouraged to communicate in French. The course is divided into four main areas of study; vocabulary (hairstyles, false cognates), grammar (subjunctive verb tense, passé compose and imparfait), culture (study of the regions of France, art history), and literature (reading a section of the novel Les Miserables). The course goals are based upon the five foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world

Focuses on PA Standards 12.1, 12.3, and 12.5

## Spanish I

Grade:
Prerequisite:
8-12
C or higher in English
Grade 8- upon teacher recommendation, must score proficient or advanced on PSSAs

This is a full year course that develops and provides students with skills in listening, speaking, reading, and writing in the target language. The course emphasizes vocabulary (i.e. describing friends/family/school, shopping, food, sports, etc.), grammar (present tense), and culture (i.e. food, music, holidays, art, etc.). The course goals are based upon the five national foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world. Focuses on PA World Language Standards 12.1, 12.3, and 12.5.

## Spanish II

Grade: $\quad 10-12$
Prerequisite: $\quad$ C or higher in Spanish I
Dual Enrollment option available through Penn Highlands Community College for three credits.

This is a full year course that develops and provides students with skills in listening, speaking, reading, and writing in the target language. The course emphasizes vocabulary
(i.e. going to the doctors, outside activities, art, music, travel, dining, etc.), grammar (present and past tense), and culture (i.e. food, music, holidays, art, etc.). The course goals are based upon the five national foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world. Focuses on PA World Language Standards 12.1, 12.3, and 12.5.

Spanish III
Grade: 11-12
Prerequisite: $\quad$ C or higher in Spanish II
This is a full year course that develops and provides students with skills in listening, speaking, reading, and writing in the target language. The course emphasizes vocabulary (i.e. technology, shopping, pastimes, travel, etc.), grammar (present, past, future tense), and culture (i.e. food, music, holidays, art, etc.). The course goals are based upon the five national foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world. Focuses on PA World Language Standards 12.1, 12.3, and 12.5 .

## Spanish IV

Grade: 12
Prerequisite: $\quad$ C or higher in Spanish III
Dual Enrollment option available through Penn Highlands Community College for three credits.

This is a full year course that develops and provides students with skills in listening, speaking, reading, and writing in the target language. The course emphasizes vocabulary (i.e. doctor visits, driving, cooking, travel, etc.), grammar (present, past, future tense and commands), and culture (i.e. food, music, holidays, art, etc.). The course goals are based upon the five national foreign language standards. These goals are that the students (1) communicate in the target language, (2) gain knowledge and understanding of other cultures, (3) connect with other disciplines and acquire information through the target language, (4) develop insight into the nature of languages and culture, and (5) participate in multilingual communities at home and around the world. Focuses on PA World Language Standards 12.1, 12.3, and 12.5.

## Common Core Math 6

Grade: 6
Math 6 is designed to explore concepts and skills aligned to the grade 6 PA Core standards and to prepare students for Pre-Algebra 7. Topics include, but are not limited to: ratios and proportional relationships; adding/subtracting/multiplying/dividing whole numbers, fractions, and decimals; writing and solving expressions and equations/inequalities; geometry-volume and area; probability and statistics.

## Common Core Math 7

Grade: 7
Common Core Math 7 is designed to explore concepts and skills aligned to the PA Common Core grade 7 standards and prepare the student for Common Core Math 8 Adv and Algebra 8 AB . Topics included but not limited to: Operations with rational numbers, problem solving with rational numbers, proportional relationships, probability, and concepts in geometry.

## PSSA 7 Remediation

Grade: 7
PSSA 7 Remediation is designed from students who did not reach proficient or advanced on the PSSA 6 state test. Students will get extra help working on their weaknesses.

## Common Core Math 8 S1 (semester course)

Grade: 8
Prerequisite: Common Core Math 7_1
Common Core Math 8_S1 is designed to explore concepts and skills aligned to the PA grade 8 Common Core standards and prepare the student for the PSSA Math 8 exam. Topics included but not limited to: solving equations, graphing and writing linear equations and linear systems, functions, angles and similarity, square roots and then Pythagorean Theorem, data analysis and displays, linear inequalities, and exponents and scientific notation.

## Common Core Math 8

Grade: 8
Prerequisite: Common Core Math 7
Common Core Math 8 is designed to explore concepts and skills aligned to the PA grade 8 Common Core standards and prepare the student for Algebra AB. Topics included but not limited to: solving equations, graphing and writing linear equations and linear systems, functions, angles and similarity, square roots and then Pythagorean Theorem, data analysis and displays, linear inequalities, and exponents and scientific notation.

## PSSA 8 Remediation

Grade: 8
PSSA 8 Remediation is designed for students who did not reach proficient or advanced on the PSSA 7 state test. Students will get extra help working on their weaknesses.


#### Abstract

Algebra 8 AB Grade: 8 Prerequisite: Common Core Math 7 Adv Algebra 8 AB is designed to explore concepts and skills aligned to the PA Keystone Algebra I standards and to prepare the student for Algebra 9 BC. Topics include: operations with real numbers \& expressions, linear equations, linear inequalities, functions, coordinate geometry, and data analysis.


#### Abstract

Algebra 9 BC Grade: 9 Prerequisite: Algebra 8 AB Algebra 9 BC is designed to reinforce Keystone Algebra I skills and to introduce more advanced Algebra concepts and skills needed to continue to Precalculus and Calculus courses. Topics include but are not limited to: solving equations/inequalities, linear Algebra, systems of linear equations/inequalities, exponents, radical expressions, factoring, operations with polynomials, functions, data analysis and probability.


## Algebra AB

Formerly Algebra I
Grade: 9
Prerequisite: Common Core Math 8
Algebra AB is designed to explore concepts and skills aligned to the PA Keystone Algebra I standards and to prepare the student for Algebra BC. Topics include: operations with real numbers \& expressions, linear equations, linear inequalities, functions, coordinate geometry, and data analysis.

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## Geometry

Grade: 10-12
Prerequisite: Algebra BC or Algebra C
Geometry is designed to introduce and explore Plane Geometric concepts and to prepare the student for Pre-Calculus/Trigonometry. Topics include but are not limited to: foundations for geometry, geometric reasoning, parallel \& perpendicular lines, triangle congruence, properties \& attributes of triangles, polygons \& quadrilaterals, similarity, right triangle \& trigonometry, and circles.

## Algebra BC

Formerly Algebra II
Grade: 10
Prerequisite: Algebra AB
Algebra BC is designed to reinforce Keystone Algebra I skills and to introduce more advanced Algebra concepts and skills needed to continue to Precalculus and Calculus courses. Topics include but are not limited to: solving equations/inequalities, linear Algebra, systems of linear equations/inequalities, exponents, radical expressions, factoring, operations with polynomials, functions, data analysis and probability.


#### Abstract

Algebra B Course 2 in Algebra I sequence Grade: 10 Prerequisite: Algebra A Algebra B is the second course in a sequence of three algebra-based courses to prepare students for the Keystone Algebra I exam. Topics may include but are not limited to: Operations with real numbers and expressions, linear equations and inequalities, functions, coordinate geometry, and data analysis.


## Keystone Remediation I and II

Grade: 10, 11
Keystone Remediation is designed from students who did not reach proficient or advanced on the Keystone Algebra I state test. Students will get extra help working on their weaknesses.

## Pre-Calculus

Grade: 11-12
Prerequisite: Geometry
The Pre-Calculus/Trigonometry course is designed to introduce and explore both advance Algebra and trigonometric functions needed to be prepared for Calculus. Topics include but are not limited to: functions (linear, quadratic, polynomial, exponential, logarithmic, radical, rational, and trigonometric), trigonometric identities, and right/oblique triangles.

Grade: 11-12
Prerequisite: None
Technical Applications is designed to explore various professions and to develop skills and knowledge needed to be successful in that field. The focus will be on units separated by disciplines. Units may include: research, projects, field trips, and hands on activities. Topics explored will include but not limited to: surveying, small business startup, local job market research, construction, job training, interviewing/resumes, job safety, gas/oil field, Civil Service preparation, state employment and technical education. The mathematics needed will be incorporated into each unit.

## Personal Finance

Grade: 11-12
Prerequisite: None
Personal Finance is designed to introduce and focus on real life financing. Topics will include, but not limited to: checking, credit cards, stocks, home/auto loans, rentals, budgeting, interviewing/resumes, income, projects and tax software. Topics correlate with the National Personal and Finance Standards.


#### Abstract

Algebra C Course 3 in Algebra I sequence Grade: 11 Prerequisite: Algebra B Algebra C is the third course in a sequence of three algebra-based courses to prepare students for the Keystone Algebra I exam. Topics may include but are not limited to: Operations with real numbers and expressions, linear equations and inequalities, functions, coordinate geometry, and data analysis.


## Calculus

Grade: 12
Prerequisite: Pre-Calculus
*Dual Enrollment option available through Mount Aloysius for three credits
Calculus is designed to explore concepts of Calculus needed to prepare students for post-secondary mathematics courses. Topics covered include but are not limited to: functions, limits, differentiation, integration, curve analysis, and applications of the derivative and the integral.

## Probability and Statistics

Grade: 12
Prerequisite: C or better in Algebra BC
Probability/Statistics is designed as a semester course. This course will introduce students to the concepts of: interpreting categorical \& quantitative data, making inferences \& justifying conclusions, conditional probability \& the rules of probability, and using probability to make decisions.

## SCIENCE

## Science 6

Grade: 6
Science 6 is designed to explore a broad range of sciences. Students will be introduced to Earth, Physical, and Biological Science concepts. Students will engage in many research activities that will reflect the practicality of science and how it affects us each day. This course is designed to prepare students for future science courses.

## Biological and Natural Sciences I

Grade: 7
Credit Value: 1
Biological and Natural Sciences I is an introductory course that explores the basic principles of Earth and Life Sciences. During the first half of the year, students will explore the natural world around them. During the second half of the year, students explore the characteristics of all living things, their basic needs, and their interactions. Students will also explore the fundamental structures of all living things such as the parts of cells, tissues, organs, etc. Students will conduct labs using the Scientific Method and learn how to produce a lab report. This course is designed to promote a positive attitude toward all aspects of science.

## Biological and Natural Sciences II

Grade: 8
Prerequisite: Completion of Science 7
Credit Value: 1
This is an introductory General Science course that explores a broad range of sciences. In this course students will explore Earth, Physical Sciences (Chemical/Physical Properties, Physics), Biological sciences (Genetics and Animal Diversity), Ecology, and Astronomy. Students will engage in many research projects that will reflect the practicality of science and how it affects us every day. Students will leave this course with a solid foundation in all of the sciences. This course is designed to promote a positive attitude toward all aspects of science, prepare students for future science courses, and prepare them for the PSSA Science 8 test.

## Biochemistry/Biology

Grade: 9
Periods/Week: 5
Credit Value: 1
Biochemistry/Biology is designed to focus on module 1 topics of the Keystone exam with increased emphasis on the chemical basis for life, bioenergetics, and homeostasis and
transport. Other emphasized topics will include cell parts and functions. Students taking this course will then move into General Biology 10 before taking the biology Keystone exam.

## General Biology 10:

Grade: 10
Period/Week: 7
Credit Value: 1.4
General Biology 10 is designed to focus on module 2 of the Keystone Biology exam with increased emphasis on cell growth and reproduction, genetics, evolution, and ecology. A comprehensive review of Module 1 topics and Module 2 will be conducted during the last grading period prior to the Keystone examination. Students taking this course will then move into Ecology, Physical Science, or Chemistry I.

## General Biology I:

Grade: 9
Periods/Week: 7
Credit Value: 1.4
General Biology I is designed to develop a basic understanding of living things in the world. The course explores fundamental ideas and concepts such as cell structure and function, genetics, diversity and classification, ecology, evolution, anatomy and physiology of animals and plants. Students will take the biology Keystone exam upon completion of this course.

## Academic Biology I

Grade: 9
Prerequisites: Students must be taking Algebra BC
Periods/Week: 5
Credit Value: 1.4

Academic Biology I is designed to develop a basic understanding of living things in the world. The course explores, at a more accelerated pace and higher level than general biology, fundamental ideas and concepts such as cell structure and function, genetics, diversity and classification, ecology, evolution, anatomy and physiology of animals and plants. Students will take the biology Keystone exam upon completion of this course.

## Ecology

Grade 10-11
Prerequisite: Academic or General Biology I, or Physical Science
Periods/Week: 5
Credit Value: 1

Ecology is the study of how organisms interact with each other and their surroundings. In
this course, we will look into some of the most important topics in ecology, and we will attempt to answer a number of different questions. How much and what type of life is present in the natural world around us? Why is the natural world so diverse? How do organisms get the energy they need to survive? And how do these organisms use this energy to survive and reproduce? The course will use critical thinking, real-life application, and research to reinforce the fundamental concepts of the course material.

Chemistry I
Grade: 10-12
Prerequisite: Academic Biology and Algebra I
Dual Enrollment option available through Penn Highlands Community College for four credits

Periods/Week: 6
Credit Value: 1.2
This course includes a study of matter with emphasis on the motions of electrons, protons, neutrons, ions, atoms and molecules. Periodic arrangement of the elements will be stressed along with the basic chemical processes. Topics covered will include: atomic theory, bonding, history and background of chemistry, chemical reactions, and interactions of matter and energy. Simple chemical calculations deal with percentage composition, percentage error, scientific notation, mole stoichiometry, and gas law problems. All the above material will be related to the importance and use of chemistry in the students' daily life.

This is a laboratory course in which the student will have the opportunity to gain skills in using equipment and handling chemicals.

## Physical Science

Grade: 10-11-12
Prerequisite: Academic or General Biology I, and/or Ecology
Periods/Week: 5
Credit Value: 1

Physical Science is a survey course of the major branches of Earth Science, Physical Science (Basic Chemistry and Physics), and Astronomy. The course is designed to instill in the student an appreciation of natural surroundings. Many of the concepts studied are encountered in the daily news highlighting their practicality.

## Hands-On; Minds-On Science (STEM)

## Can take each year 9, 10, 11, 12

Grade: 9-12
Periods/Week: 5
Credit Value: 1

This is an academic elective whose main focus is to prepare students for the Science Olympiad, and other similar competitions that take place each year. The events are rotated in yearly cycles to reflect the ever-changing nature of genetics, earth science, chemistry, anatomy, physics, geology, mechanical engineering, and technology. Emphasis in the course is placed on active, hands-on learning and group participation. All material covered is aligned with Next Generation Science Standards.

Areas covered include Life, Personal, and Social Science, Earth \& Space Science, Physical Science and Chemistry, Technology and Engineering, and The Nature of Science.

The course is divided into four major scientific categories:

- Core Knowledge $\rightarrow$ Students will be required to choose a topic to research and gain knowledge about
- Building/Design $\rightarrow$ Students will be required to design,build, and test various devices given a set of parameters that need to be followed.
- Hands-On/Laboratory $\rightarrow$ Students will be given a topic/concept to research and gain general knowledge about. They will then be required to develop a method to test the given concept which was chosen.
- Hybrid $\rightarrow$ This area of the course will combine two or more of the above areas and allows students to display both their core knowledge of a subject as well as work on the technical/building aspects of that subject.


## Biology II

Grade: 11, 12
Prerequisites: Academic Biology I or General Biology I \& Chemistry I Students must have completed both of these courses with a C or better.
Requirements: Students will be required to dissect a series of animal specimens. Dual Enrollment option available through Mount Aloysius for four credits Weighted Course

This course is offered primarily to eleventh and twelfth grade academic track students who have met the prerequisites for the course. Many of the students taking Biology II are interested in continuing their studies in the natural science or health science fields.
The Biology II course is a more in-depth study of the science of Biology. Course units of study will include cell structure and function, Genetics, animal anatomy and physiology, evolution, biochemistry, and current events.

## Chemistry II

Grade: 11, 12
Prerequisite: Chemistry I (C or better)
Dual Enrollment option available through Mount Aloysius and Penn Highlands Community College for four credits.
Weighted Course
This course picks up where the student left off in Chemistry I. The course is intended for academic students planning further study in a science related field at the college level. Chemistry topics covered are more in depth of theory and more strenuous in
mathematical expectations than Chemistry I. Topics covered will include: solutions, bonding, solubility, acids/bases, oxidation/reduction, thermochemistry, kinetics, and basic organic nomenclature using the IUPAC system. All the above material will be related to the importance and use of chemistry in the students' daily life.

This is a laboratory course in which the student will have the opportunity to gain skill in using equipment and handling chemicals.

## Anatomy \& Physiology

Primarily for grades 11-12
Prerequisites: The course is open for all academic students who have completed Chemistry I and Biology I (with a C or better)
**Dual Enrollment option available through Penn Highlands Community College for three credits. Weighted Course

This course is designed to give students an in-depth understanding of the human body and the essential concepts of anatomy and physiology. Students enrolled in the course should be those individuals who wish to seek a career in the health sciences or have a strong interest in science. Course information will include, but is not limited to: The reproductive, skeletal, muscular, nervous, integumentary, respiratory, and circulatory systems, as well as physiology and kinesiology. Course material will also reinforce aspects of nutrition, metabolism, and biomechanics. The course will use critical thinking, real-life application, and research to reinforce the fundamental concepts of the course material. Students enrolled in Anatomy and Physiology are required to participate fully in the dissection(s).

## Physics

Grade: 12
Prerequisite: Algebra I, II
Community College for four credits.
Weighted Course

Physics is the most fundamental of the sciences. Physics is increasingly found to be the underlying study of not only the physical sciences but also the earth sciences and the biological sciences as well. This high school level physics class is designed to introduce prospective college students to their first mathematically based physics experience. Algebra I and II are prerequisites, and it is suggested that trigonometry should be at least taken concurrently. Strong emphasis is placed on solving problems. A scientific calculator is recommended. This course also involves laboratory experiences that reinforce concepts introduced during the regular class.

## SOCIAL STUDIES

## $6^{6^{\text {th }} \text { Grade Social Studies }}$

Social Studies introduces the students to World History after 600 C.E. Different cultures, people, and the events that impacted their lives are studied. Units include the Middle Ages, the Renaissance, the Age of Ideas, Early Explorers, Ancient China, Ancient Japan, Ancient India, Mesoamerica and Global Changes. Annotation, map, and geography skills are reviewed and practiced.

## $7^{\text {th }}$ Grade Social Studies

Grade: 7

This course is designed to introduce seventh grade students to world history. Content begins with prehistory and follows the development of human civilization through ancient times up to the Middle Ages. Emphasis includes the following: geographical features of specific civilizations, accomplishments and contributions of specific civilizations, and the history and influence of major world religions.

## 8th Grade Geography

Grade: 8

This course is designed to provide students with core knowledge about the world's geographical regions, the ability to utilize basic geographical skills, and the understanding of common geographic terminology. World Geography encompasses all major land areas and bodies of water on the globe. Map reading skills and U.S. Geography will receive additional attention. Countries will be examined with emphasis on the land, the people, and their history.

## American History I-9 (Soc. St.9)

Grade: 9
Dual Enrollment option available through Penn Highlands Community College for three credits.

American History I will examine and analyze the events and people that shaped the American way of life. Content traces early exploration and settlement of North America leading to the creation of the new United States of America, continuing through the early years of the republic. The year culminates on the eve of the Civil War, with the nation poised for conflict.

## American History II-

Grade: 11
Dual Enrollment option available through Penn Highlands Community College for three
credits.

As a continuation of the ninth grade course, American History II will examine and analyze the events and people that shaped the American way of life. Content area spans from the Civil War through the end of the Great Depression. The themes of industrialization, labor, the west, American Expansion, and warfare receive special attention.

## Civics

Grade: 10
Dual Enrollment option available through Penn Highlands Community College for three credits.

The goal of this course is to prepare students to exercise their political responsibilities as informed citizens. To achieve this goal the civics course is designed to provide students the opportunity to learn about their rights and responsibilities through sources materials, class discussions and role playing activities. Emphasis is placed on foundations of government, the United States Constitution, The three branches of government, state and local government, citizenship, media and international affairs. Students will be assessed using objective tests and quizzes, written essay, and Moodle activities. A cumulative final will be given at the end of the year.

## Contemporary World History

Grade: 12
Contemporary World History is a continuation of the American History courses but with a world emphasis. Global conflicts and events are studied with the inclusion of other cultures and viewpoints from around the world. Chronologically, the class examines events from World War II to the present.

## American Government

Grade: 12
This course introduces the student to the process and institutions of the American national government. The course examines the evolution of the principles, form and operation of the national government system with special emphasis on constitutional issues, the President, Congress, the judicial system, the party system, and public opinion and the media in politics.

## Advanced United States History

Grade: 12
Prerequisite: See Instructor
Dual Enrollment option available through Mount Aloysius for three credits
Weighted Course

Advanced U.S. History is a college style course which surveys 19th and 20th century U.S. History. Reading and writing requirements are substantial; much of the work is project-based. This course may be substituted for the 12th grade Social Studies requirement.

## Economics/Criminal Justice

Grade: 11-12
Prerequisite: See Instructor
Credit Value: . 5

Economics presents the core principles of microeconomics where students learn the role of demand and supply in determining prices in competitive versus monopolistic markets. This course focuses on the most important tool in economics, supply and demand analysis, and applies those concepts in order to explain current economic issues.

Criminal Justice provides a foundation for the procedures that various agencies use to identify and treat criminal offenders by giving students a basic introduction to crime, law, and justice. Students will examine an overview of the law enforcement field with particular emphasis on the adjudication process which also explores the juvenile justice system.

## PE/HEALTH

## Adapted Physical Education

Grade: 7-12
Prerequisite: Special Education
Periods/Week: As directed by Doctor or IEP
Credit Value: . 5 semester/ 1 full year
The Adapted Physical Education course is designed to meet the needs of the student whose disability prevents participation in the regular physical education class (must be documented in the student's Individualized Education Program). All areas are designed with individual student needs and limitations in mind.

## Health 8

Grade: 8
Periods/Week: 5 (9 weeks)
Credit Value: . 25
Health 8 is provided for students so that they may gain a better understanding of their own physical, mental, and emotional makeup as well as others. The course is designed to provide examples of acceptable social, emotional, and physical behavior to act as guides for students going through the adolescent period. With a better knowledge of themselves
and others, it is hoped that these young people might be better prepared for the decisions of the adult world.

## Health 11

Grade: 11
Periods/Week: 1 Semester
Credit Value: . 5

This course will emphasize the development of physical, mental/emotional and social health of the individual. Units covered in Health 11 include the following: understanding the physical structure, coping with emotional and mental problems, disease prevention, reproduction and human growth, nutrition, the effects of nicotine products, alcohol and drugs, community health, responding to emergencies and social health problems. We strive to make students aware of healthful and risk behaviors and their holistic effect on their physical, mental/emotional, and social well-being.

## Physical Education

Grade 6/7
Period/Week: 9 weeks
Credit Value: . 25
Physical Education is that part of the total educational program that focuses on the growth and development of physical skills and abilities of an individual through games and contests. Physical Education gives each student a chance to be a participant. Students will be introduced to team competition and will incorporate skills, techniques, strategies and rules learned for team sports. Students will be introduced to a variety of individual/dual sports concentrating on skills, techniques, strategies, and rules. Good sportsmanship, responsible attitudes, appreciation toward oneself, and regard for others are all promoted in this program.

## Physical Education <br> Grade: 8 <br> Period/week: 1 semester <br> Credit Value: . 5

Physical Education is that part of the total educational program that focuses on the growth and development of physical skills and abilities of an individual through games and contests. Physical Education gives each student a chance to be a participant. Students will be introduced to team competition and will incorporate skills, techniques, strategies and rules learned for team sports. Students will be introduced to a variety of individual/dual sports concentrating on skills, techniques, strategies, and rules. Good sportsmanship, responsible attitudes, appreciation toward oneself, and regard for others are all promoted in this program.

## Physical Education <br> Grade: 9

Physical Education is that part of the total educational program that focuses on the growth and development of physical skills and abilities of an individual through games and contests. Physical Education gives each student a chance to be a participant. Students will be introduced to team competition and will incorporate and refine skills, techniques, strategies and rules learned for team sports. Students will be introduced to a variety of individual/dual sports concentrating on skills, techniques, strategies, and rules. Good sportsmanship, responsible attitudes, appreciation toward oneself, and regard for others are all promoted in this program.

## Physical Education (Male/Female)

Grade: 10-12
Periods/Week: 1 Semester or 2 days/week for the year
Credit Value: . 5

Physical Education is that part of the total educational program that focuses on the growth and development of physical skills and abilities of an individual. Sports offered will be based on class size, class interest and instructor's discretion. Skills, techniques, strategies and rules learned for the sports that are taught will be used enabling the student to progress to a higher level of ability. Potential use of these lifetime activities will be emphasized. Good sportsmanship, responsible attitudes, appreciation toward oneself, and regard for others are all promoted in this program.

## ELECTIVES

## Accounting I

Grade: 10-12
Credit Value: 1
Dual Enrollment option available through Penn Highlands Community College for three credits.
(Counts as a math credit if student scores Proficient or Advanced on the Algebra Keystone Exam, otherwise 1 credit general elective)

Accounting I is an introductory course in financial accounting - the language of business. If you might pursue a career in a business-related field, you have thought about owning your own business, or you are simply interested in money management skills, this class will be beneficial for you. This course will explore careers in business and take students on a journey through the procedures of accounting for profit-motivated businesses. The "how" and the "why" of accounting will enable students to keep accurate financial records required to produce useful business information. It will also give students the capacity to use that financial information to make wise business decisions.

Grade: 11 or 12
Credit Value: 1
Prerequisite: $85 \%$ or better in Accounting I or Instructor Permission
(Counts as a math credit if student scores Proficient or Advanced on the Algebra Keystone Exam, otherwise 1 credit general elective)

This advanced accounting course is designed for both college-bound and vocational/job-ready students. Accounting II will build on the concepts gained in Accounting I. This course will include accounting for partnerships and corporations through advanced transactions and activities, as well as emphasize the importance of business ethics. Business simulations will be used throughout the course to apply the procedures used during the accounting cycle. We will focus on gaining a strong foundation of fundamental accounting procedures that will especially help prepare students for careers in the business field.

## Advanced Art I

Grade: 11 and 12
Prerequisite: $93 \%$ in Graphic Design
The focus of this course is to build upon the students' current artistic foundation acquired through past art classes. The course will give the students the opportunity to discover and learn about famous artists and artworks found within society and grant them the opportunity to explore advanced artistic processes and mediums.

## Advanced Art II

Grade: 11 and 12
Prerequisite: $95 \%$ in Advanced Art I
Dual Enrollment option available through Penn Highlands Community College for three credits.

The course is specifically designed for students who are looking to further their artistic education in hopes of acquiring an art career in their future endeavors. It will allow the students to explore and master their very own artistic skills within the creation of an art portfolio. This portfolio of work will be the students' springboard into the artistic world outside of their high school experience.

## Painting and Sculpture

Grade: 10-12
Prerequisite: NONE
The course is specifically designed as a dual credit program with the Penn Highlands Community College. It can be taken for credits through their ACE program or as an in depth artistic learning experience. The course explores numerous painting and sculptural
processes and techniques as a means of furthering our students' understanding of the mediums and styles available to them as artists. .

## Baking and Pastry

Grade 10-12
Prerequisite: None
Credit: . 5

This course will give students the basic understanding and confidence of baking and pastry techniques. They will learn the functions of ingredients, terminology and rules of baking. Students will also participate in hands- on labs and experiments with baking breads, cookies, cakes, pies, frostings, glazes and other specialty desserts.

## Band

Grade: 7-12
Prerequisite: Permission
Credit: 1

This course is designed to give the student an enriching and diverse instrumental music education. The band provides a number of performance opportunities for the student in a variety of settings. The daily objective of the course is to foster and promote musical growth through the playing of an instrument. As a member of the band program, group effort and cooperation are necessary for a successful program.

During the fall, marching band performs numerous times at parades, fairs, football games, and other local events. Marching band includes visual squads of majorettes, silks and honor guard. After marching season, the ensemble transitions into concert band. Concert Band usually performs three concerts a year. Students who excel in band, have the opportunity to participate in county, district, regional, and state bands. Pep band, musical pit band, and jazz band are also available for students to participate in. All students in band must participate in both marching and concert band and agree to attend after school rehearsals and performances.

## Robotics (Battle Bots)

Grades 9-12
Credit: 1

This course is open to any student in grades 9-12. As a team, we will compete in two battle bot competitions during the school year. One competition will be the Heritage Conference Battle Bot Competition that will take place at one of the schools in the Heritage Conference. The other competition will take place at Indiana School District. Working in small teams, you will have the choice of being on the design team (CADD), build team (wood shop), or the electrical wiring (electrical) team. As a team, you will design, build, test, and compete in these battle bot competitions to destroy the opponents robot.
We will work with the ICTC machining students with our robot design. We will take a field trip to ICTC once a year to get to know those students and to get an understanding
of how they will take our working drawings to make each part of our robot. This class is perfect for the students who have a big imagination and like to build and destroy things!!!

## Business Management/Law/Marketing

Grade 10-12
Credit Value: 1

Business Management/Law/Marketing is a full year course developed to provide students with a solid foundation of established business principles and practices that form the groundwork for all business operations. Business fundamentals such as economics, legal, and social foundations are presented along with a close look at organizing businesses, marketing practices, and financial operations, managing and developing human relation skills and making difficult business decisions in a competitive atmosphere. This course will also introduce students to the legal issues that have an impact on everyday living, employee/employer rights and responsibilities, contracts and the latest marketing trends and strategies being used in the business world. This will present students with career opportunities available in the legal, management, and marketing fields. This course will be especially beneficial to vocational business students and college bound students who are considering a business related major.

## Cabinet Making

Grade: 9-12

This course is designed for students who are interested in investigating opportunities in the woodworking industry. Students will explore the basics of cabinet making through a series of activities that will result in an advanced level product (or series of products). Areas that will be covered include calculating and constructing various cabinets with face frames, raised panel doors, and/or drawers to create a professionally built cabinet based on industry standards. Additionally, students will install a wall cabinet, a base cabinet, counter tops and moldings in a room layout that meet construction standards. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## CAD Engineering I

Grade: 9-12 Semester Course

In this course, the primary goal is for students to be introduced to the engineering program AutoCAD. AutoCAD is a Computer Aided Design (CAD) software program that students will use to apply it to a variety of drawing and design situations. After an introductory orientation, students will learn to read and draw several types of technical drawings. This information will then be applied in the design process as student's work individually and/or in groups on a number of engineering activities to produce different technical drawings, as well as, layout and design a kitchen based on current building codes. Students will play the role of professional designers and planners who create a design solution to meet the needs of the client. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## CAD Engineering II

Grade 10-12 Semester Course

In this course, students will build upon their skills in CAD Engineering I to gain a broad understanding of 2-dimensional and 3-dimensional Computer-Aided Design (CAD) and modeling with a focus on construction- and architecture-specific applications. Students will learn to read and design a floor plan based on specifications that meet current building codes. After completing the floor plan design, students will build a "scale" model of their design using an architectural ruler. Additionally, students will gain a good understanding of industry based blueprint trade terminology. Students will play the role of professional designers and planners who create a design solution to meet the needs of the client. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Chorus

Grade: 7-12
Credit Value: dependent on time scheduled (Semester/ Classes per week)

Senior Chorus provides the opportunity to develop proper vocal techniques through the study and performance of varied choral repertoire. In addition to performing in school-related activities such as Christmas and Spring Concerts, the Senior High Chorus may take part in selected community events. Attendance at these performances is required. Individual students also may qualify for participation in selected choruses at the county, district, regional, state, divisional and even national levels.

## Computer Applications

Grade: 10-12
Credit Value: 1
Dual Enrollment option available through Penn Highlands Community College for three credits.

Computer Applications is a hands-on, full-year course designed to introduce students in grades 10 through 12 to the software applications available in Microsoft Office. These applications will include Word, Excel, PowerPoint, and Publisher. Students will be given the opportunity to work on hands-on computer projects to have fun using technology! Course objectives are developed for both personal and business use. The course is open to students from all curriculum areas and is highly recommended for college bound and vocational students.

## Computer Literacy

Grade: 9 or 10
Credit Value: 0.5
Computer Literacy is a one-semester course required for graduation. The course is designed to introduce students to the basics required to operate a computer and an
introduction into the Microsoft Office software program. Students will be required to show competency in Word (Word Processing), Excel (spreadsheets), PowerPoint (graphics presentation), Publisher, and Internet usage for successful completion of the course. The course is almost entirely hands-on using the Penns Manor S.D. computer networking system.

## Creative Foods I

Grade: 10-12
Semester Course
Credit Value: . 5

This is a hands-on course that allows students to advance their skills in food preparation in a lab setting. They will be introduced to specialty skills such as cake decorating. As well as baking items such as breads, cakes and pies, preparation, storage and preservation of fruits and vegetables, cooking homemade pastas and casseroles, we will also explore foods of the United States and Canada.

## Drivers Education:

Grade: 9-12
Prerequisite: None
Periods/Week: One Semester
Credit Value: 0.5

The classroom portion of Drivers Education is designed to help novice drivers develop the knowledge, skills, and attitudes necessary to become safe, low-risk, responsible drivers. After successfully completing this class, students will have a 6 hour BTW (Behind the Wheel) course conducted by Canton's Driving School.

## Exploring Art

Grade: 9
The focus of this course is to build upon the students' existing art studio skills through the exploration of many different artistic mediums. The course is intended to make the students aware of what is available to them within the study of art and the possibilities art offers them as individuals.

## Family and Consumer Science

Grade: 7
Duration: Quarter
This course is a hands-on course that introduces basic life skills. Students will learn about food safety, nutrition, basic food preparation, hand sewing, consumer awareness, and child development. Students will understand these skills through hands-on activities in
the classroom.

## Family and Consumer Science

Grade: 9
Duration: Semester
Credit: . 5

This course examines life management skills in the areas of personal, family living and wellness. Students will be introduced to topics on nutrition, foods; financial management; consumerism; appropriate child care practices; and job readiness. Emphasis is placed on students applying these skills during their teen years.

## Finished Carpentry

## Grades 9-12

This is an introductory class in carpentry, designed to give an overview of the various components of residential construction and building techniques used in the carpentry industry today. Students will learn about and use basic hand tools and power tools with an emphasis on the maintenance and safe operation of these tools. They will learn about standard lumber, engineered lumber, nails, fasteners, sheathing materials and various other building materials that are utilized in the construction industry. Students will also gain a better understanding of math practices that are commonly used in the construction industry. Students will also learn framing techniques to build a kitchen wall and install wall and base cabinetry in the kitchen. In addition to this, students will gain general knowledge reading and interpreting architectural blueprints. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Individual Financial Fitness

Grade: 11-12
Duration: Semester
Credit Value: . 5

The course will introduce students to the important aspects of personal finance, including earning income, spending, saving, borrowing, investing and managing money. The course is based on national standards.

Topics will include: resources, decision making, economic thinking, Why stay in school?, career choice, managing cash, using a checking account, taxes, saving, saving plans, investments, lenders and borrowers, and cash or credit.

## General Art

Grade: 8

The student will master perspective drawing by learning to create original fantasy objects and buildings. Also, the student is introduced to the concepts of negative space and observational drawing, using varied matter.

## General Music

Grade 8
9 Weeks
Credit Value: . 25
This course is designed to provide a musical introduction to playing the acoustic guitar. Through in-class instruction, individual practice, and playing assignments, the student will advance their understanding of music and guitar performance. The daily objective of the course is to foster and promote musical growth through the playing of an instrument by the student. With experience, the student will be able to play a variety of chords common to contemporary music, read a "lead sheet" as well as standard music notation. The overall objective is to provide the student with enough introductory knowledge of the guitar to be able to continue playing and learning after the course has ended.

## Graphic Design

Grade: 10-12
Prerequisite: Completion of $8^{\text {th }}$ grade Art and Exploring Art
Credit Value: . 5

The students will concentrate their artistic creativeness into techniques and mediums that will be lucrative as career possibilities. The course will work with computer aided design techniques that will help launch career possibilities such as graphic design, t-shirt making, website design, 3-Dimensional rendering (game design/animation), architectural design, interior design, etc.

## Introduction to Business

Grade: 9-12

A one-year course designed to introduce the student to many aspects of the business field. Each 9 week period will be used to acquaint the student with: economics, entrepreneurship, organizational structures, management, the role of government in business, money and financial institutions, marketing, human resources, technology advancements in the workplace, career planning, consumer decisions, and money management. Each of these topics will present terminology that will allow the student to see how business affects everything they will do upon graduation.

Introduction to Computer Science

An interactive introductory course for students brand new to programming that teaches the foundations of computer science using the Python language. Not only will this semester- or year-long course prepare students for AP Computer Science A and AP Computer Science Principles, but it will teach students how to think computationally and solve complex problems, skills that are important for every student.

## Journalism

Grade: 10-12
Prerequisite: Teacher approval
Journalism uses a hands-on approach to develop desktop publishing and writing skills, focusing on the publication of the school newspaper, the Cometarian. The class is predominantly production-based. Students learn all aspects of publication from budgeting to printing and are encouraged to develop interpersonal skills needed for interviewing and teamwork. Every class member is a staff member who is required to write for the publication and take on additional responsibilities relating to his/her staff position.

## $6^{\text {th }}$ Grade Keyboarding

Grade: 6
Credit Value: . 25
This nine-week course will introduce students to proper typing techniques and the skill of entering alphabetic, numeric, and symbolic information on a keyboard using touch typing. The 10 -key number pad may also be introduced if class time permits. Emphasis will be placed on proper technique, as well as speed and accuracy. Interactive "Typing Instructor" software will be used to enhance typing abilities.

## Manufacturing

Grade: 9-12

This course is a hands-on course designed for students interested in understanding business concepts used to make a company successful, basic woodworking concepts, and product design. Students will become familiar with hand tools, different wood types, power equipment, basic wood joints and joinery processes. Wood, tool identification, adhesives, clamping techniques, and wood substitutes are explored. Students will have an opportunity to participate in quality control experiments and will construct a variety of wood projects. After students have gained an understanding of all the shop procedures, students will form a mock company to produce a product. The students will explore all levels of management and labor required to make the company successful. Every student will be an "employee" of the company and have specific duties to make the company profitable and successful. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Nutrition and Culinary Essentials

Half year course
Grade: 10-12

This course gives students an in-depth look of the nutrients that are provided by foods and how their body uses those nutrients. Focusing on Carbohydrates, Proteins, Fats, Vitamins, Water and Phytochemicals. Students will learn how to prepare nutritional foods and taste foods that are provided from each of the nutrients.

## Parenting

Half year course
Grade: 10-12

This course prepares the student for the future role of being a responsible parent. Emphasis will be given to the processes of parenthood, including conception, pregnancy, prenatal development, and birth through an in depth study of the family structure, human reproduction, and child development from birth to teen. Students will also be given the opportunity to experience hands-on what it will be like to be a parent of a newborn baby using the baby think it over simulator provided by the instructor.

## Living on Your Own(LOYO)

Grade: 10-12
Full Year
This course is designed to allow students to take action for the well-being of themselves and others in the family, workplace, and community. This course prepares students to live on their own after high school. Topics include financial management, personal and future relationships, career development, college preparation and nutrition, wellness as well as food preparation. The focus is on what students need to know and how to manage work and family responsibilities after high school through hands-on activities.

## Psychology

Grade: 11-12
Dual Enrollment option available through Penn Highlands Community College for three credits.

Psychology is an elective course designed to expose students to the many aspects of the field of psychology. Content includes notable people and events in the development of the discipline. The functions of the human mind and its effect on people's actions receive detailed attention. Psychological disorders and their treatment, personality theories, memory and learning, as well as human development throughout the lifespan are also studied. The course is meant to prepare students for an introductory psychology course
in college and give general information on psychology that can be valuable in everyday life.

## Social Media Production

Grade: 11-12 (or Instructor Permission)
Credit Value: 1
This is a hands-on, full-year course designed to be a student-run social media production group! Students will create and post content related to events occurring throughout the Penns Manor School District. Students will take photographs and videos of events throughout the day to post to the Penns Manor Facebook and Instagram pages. Technology lessons will also be completed throughout the course including the use of Photoshop, Business Suite for Penns Manor social media accounts, etc. This class will also record daily announcements to show each morning in the auditorium and cafeteria.

## Sports and Economics

Grade: 10, 11, 12
Prerequisite: Algebra I
Credit Value: . 5

This applied economics course explores various aspects of the economics of sports and sport leagues. We will consider a number of topics, including:

- The business and economics of professional team sports and sports broadcasting.
- Analysis of leagues' competitive balance policies.
- Player relations issues including analysis of the drivers of players' salaries.
- The public finance aspects of professional sports teams and stadium financing.
- Relevant issues in collegiate sports.


## STEM Engineering 6

## Grade: 6

In this course, students will engage in projects aligned to Science, Technology, Engineering, and Mathematics (STEM). Possible activities that students will participate in, but not limited to, are amusement park design/build, 3D printing, and CAD applications using the design software TinkerCAD. In doing these activities, students will compete in real-world activities that use the principles of simple machines, critical thinking, designing, team work, and problem solving of real world problems to find a solution in a practical format.

## STEM Engineering 7

Grade 7

This course will introduce students to basic woodworking concepts and safe working habits in a wood shop environment. Students will become familiar with hand tools and the safe, proper use of various woodworking equipment. Students will learn how to measure using a 16th scale ruler. Students will have the opportunity to do one of two activities. One, manufacture a clock based on engineering specifications given in an engineering drawing. Two, develop a CO2 dragster out of basswood following strict design specifications given by the instructor. Both activities will require students to develop/use problem-solving skills, creative/innovation skills, and data interpretation skills to help prepare them for the job skills needed in the future.

## STEM Engineering

Grades 9-12
STEM engineering curriculum is based on the idea of educating students in the four specific disciplines of science, technology, engineering and mathematics in an interdisciplinary and applied approach. Rather than teach the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world applications. Engineering Design and Problem Solving reinforces and integrates skills learned in previous mathematics and science courses. This course emphasizes solving problems, moving from well-defined toward more open-ended, with real-world application. Students apply critical thinking skills to justify a solution from multiple design options. This course is intended to stimulate students' ingenuity, intellectual talents, and practical skills in devising solutions to engineering design problems in a project-based learning environment.

## Wood

Grade: 9-12
This course will introduce students to basic woodworking concepts and product design. Students will become familiar with hand tools, different wood types, power equipment, basic wood joints and joinery processes. Wood and tool identification, adhesives, clamping techniques, and wood substitutes will be explored. Additionally, students will engage in learning activities that demonstrate their knowledge of lumber materials used in the process of selecting lumber for construction grade material to cabinetmaking material. Tree identification, timber-sawing methods, methods of drying green lumber, and identification and description of defects in lumber will be taught to give students an understanding of how material is chosen for product selection. A wood project incorporating all of the above techniques will be chosen by the students to produce. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Wood Fabrication

Grade 9-12

This course is designed for students interested in investigating opportunities in the woodworking/manufacturing industry. Students will explore the basics of cabinetwork through a series of activities that will result in an advanced level product (or series of
products). Areas that will be covered include product design, aspects of cabinetwork and millwork, assembly, finishing, lumber specifications, cost estimation, and careers in the manufacturing industry. Additionally, students will learn to identify various materials used in determining its use as cabinet lumber and/or construction grade lumber. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Wood Techniques

Grades: 9-12
This course is offered for students interested in learning lifelong skills in the area of woodworking and millwork. The students will have a variety of areas to select from including cabinet making, as well as, other advanced areas of millwork. During this course, students will gain an understanding in planning/designing a project, selection and use of materials, including tools and machines to produce a finished product, material identification, and different procedures used in the industry to manufacture custom millwork. Methods of instruction in this course will include: class lecture, demonstrations, hands on practice, class discussion and videos.

## Life and Workplace Readiness

Grades: 11-12
Semester Course
Credit Value: . 5
*Graduation Requirement
Life and Workplace Readiness is designed to prepare students for placement in the workforce and to teach the employability skills needed to succeed in a high-performance work organization. The primary focus of this course will be to teach students transferable skills necessary to succeed in the changing workplace through teamwork, problem-solving, communication, self-management/exploration, creativity, employer expectations, conflict management, and overall career readiness. Students will enhance soft skills, workplace skills, interpersonal skills, communication skills, and leadership skills while becoming career-ready. Students will also focus on personal money management by covering topics such as banking, credit, saving, investing, retirement, taxes, insurance, etc. This course is beneficial to all curriculum areas in preparing to enter today's workforce.

## World Foods (Formally Creative Foods II)

Grade 10-12
Semester course
Credit Value . 5
This class is designed to permit students to explore advanced food preparation techniques. Students will continue to practice the basics of food preparations, understanding nutritional needs, and standard operations in the kitchen. Students will also be able to learn and implement more advanced techniques and experiment with a variety of different equipment pieces.Students will explore, prepare, and taste foods of the Caribbean, Mexico, Asia, Africa, and Europe.

## Yearbook

Grades: 9-12
Prerequisite: minimum 77\% average in previous year's language arts class, two teacher recommendations

The Yearbook Processing and Design journalism curriculum offers writing, analytical communication, computer, photography, and leadership skills. In addition, it provides students with the opportunity to plan, produce, market, and distribute a product for the entire school community. The students use an on-line program to produce the Comet Flash yearbook. The students have an opportunity to gain life skills, assume responsibility, and have fun at the same time.

## SPECIAL EDUCATION

## Special Education - Life Skills Support Grades 6-12

The Life Skills Support Program consists of a functional based curriculum designed around students' current IEP goals and objectives. While the major subject areas of reading and math are taught in preparation for the Pennsylvania Alternate System of Assessment (PASA), a major component to the curriculum is Community Based Instruction (CBI), with an emphasis on students age 14 or older transitioning to post-secondary life.

## English/Language Arts 6

This learning support Language Arts provides students practice in grammar proficiency, with a strong emphasis in writing while working towards IEP comprehension, writing, and fluency goals. This course includes a focus on paragraphs and sentence structure using the Pennsylvania Core Coach books. Students will practice writing text dependent analysis, narratives, informational, and argumentative essays. Listening and speaking skills are also emphasized. Traditional rules of grammar and spelling are studied. Group and individual projects incorporate cooperative learning activities with technology and research skills. Review and practice address the Pennsylvania Core Standards for Language Arts to prepare students for the Reading PSSA.

Reading is designed using developmental comprehension strategies. The objectives increase Text Dependent Analysis, literary terms, comprehension, skills, fluency, and vocabulary. Students will also develop an awareness of different types of text. Literature studied covers the forms of non-fiction, fiction, argumentative, and informational text. Also included are poetry, drama, short stories, essays, and novels. The Pennsylvania Core Coach book, Study Island Program, and Pennsylvania Core Standards are used in preparation for the PSSAs.

## Jr. Language Arts

Grades 7-8
This learning support junior language arts course is designed to further develop student skills in reading, oral and written language, as well as skills in listening. Students will learn and apply the following skills: sentence analysis, mechanics, editing, reporting, inferring, clarity, relevance, expanded writing process, using resource materials, study skills, usage and grammar, vocabulary, reading comprehension strategies, composition, word analysis, and word analysis extensions. An emphasis is on grade-level PA Core Standards for English Language Arts in preparation for the PSSA, Keystone Exam, and PASA.

## Sr. Language Arts

Grades 9-12
This learning support senior language arts course is designed to further develop student skills in reading, oral and written language, as well as skills in listening. Students will learn and apply the following skills: sentence analysis, mechanics, editing, reporting, inferring, clarity, relevance, expanded writing process, using resource materials, study skills, usage and grammar, vocabulary, reading comprehension strategies, composition, word analysis, and word analysis extensions. An emphasis is on grade-level PA Core Standards for English Language Arts in preparation for the PSSA, Keystone Exam, and PASA.

## Jr. Common Core Mathematics 6: <br> Grades: 6

This course is centered on students that have an IEP and objectives that need assistance with mathematics more than what is offered in the regular education classroom. Students will be introduced to, practice, and be able to apply mathematics to real life situations in order to be successful post-secondary. Students in grades 6 will be exposed to material that is present on the PSSA and aligned to the Pennsylvania Core Standards for Mathematics. They will also perform their progress monitoring for math in this class that relate to their goals in their IEP. Topics covered but not limited to: solving equations, integers, fractions/decimals/percents, polygons, expressions, area and perimeter, nets and probability and statistics, fractions and operations with fractions.

## Jr. Common Core Mathematics 7: <br> Grade: 7

This course is centered on students that have an IEP and objectives that need assistance
with mathematics more than what is offered in the regular education classroom. Students will be introduced to, practice, and be able to apply mathematics to real life situations in order to be successful post-secondary. Students in grades 7 will be exposed to material that is present on the PSSA and aligned to the Pennsylvania Core Standards for Mathematics. They will also perform their progress monitoring for math in this class that relate to their goals in their IEP. Topics covered but not limited to: solving equations, integers, fractions/decimals/percents, polygons, expressions, area and perimeter, nets and probability and statistics.

## Jr. Common Core Mathematics 8:

Grade: 8

This course is centered on students that have an IEP and objectives that need assistance with mathematics more than what is offered in the regular education classroom. Students will be introduced to, practice and be able to apply mathematics to real life situations in order to be successful post-secondary. Students in grade 8 will be exposed to material that is present on the PSSA and aligned to the Pennsylvania Core Standards for Mathematics. They will also perform their progress monitoring for math in this class that relate to their goals in their IEP. Topics covered but not limited to: rational and irrational numbers, square and cube roots, scientific method, multi-step equations, Pythagorean Theorem, Functions, Slope, transformations, Using Linear Data, volume, patterns, and multiple representations of data.

## Sr. Algebra A, B and C <br> Grades: 9-11

This course is centered on students that have an IEP and objectives that need assistance with mathematics more than what is offered in the regular education classroom. Students will be introduced to, practice and be able to apply mathematics to real life situations in order to be successful post-secondary. Students in grades $9-11$ will be exposed to material that is present on the Algebra Keystone Exam and aligned to the Pennsylvania Core Standards for Mathematics. They will also perform their progress monitoring for math in this class that relate to their goals in their IEP. Topics covered but not limited to: rational exponents, rational and irrational numbers, order of operations, functions, linear functions, Pythagorean Theorem, expressions, slope, polynomials, simplifying radical expressions, multi-step equations, inequalities, measurement, data, and probability.

## GUIDANCE

## Guidance 6

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    Grade: }
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Guidance 6 is designed for all students in grade 6. The class is based on our schools mission statement, which includes preparing students in academic skills, career
exploration, life skills, and social responsibility in order to help them become productive students/citizens in an ever changing society. During the course of this class, students will begin to develop a comprehensive career portfolio by completing self-assesments and interest inventories. Students will also complete career artifacts that will be used in their 339 career portfolios. Guidance 6 is graded according to student participation and the completion of coursework.

## PROGRAM OF STUDY

## Introduction to Agriculture Careers and Leadership <br> Grade Level: 9-10

Full year 1 credit
The Agriculture Career and leadership class is an introduction to all fields of agriculture. This is the first class a student will take in the 4 year Agriculture Education Program. The units covered in this course are Wildlife Management, Soil Conservation and Water Quality, Ag Record Keeping, Horticulture and Animal Science. All Students selecting this course will be in the FFA. Students will present a prepared speech of the FFA creed, and will need to carry a supervised occupational experience project. This will be used in the Agriculture Experience Tracker book. Students planning a career in Agriculture Education, Forestry, Agronomy, Veterinary Science or other Agricultural careers should select this course.

## PRINCIPLES OF AGRICULTURAL SCIENCE - ANIMAL (ASA)

Pathways: S\&H
Full Year CIP 01.999
1.00 Credit

Requirements: Sophomores, Juniors, \& Seniors
The major focus of the Principles of Agricultural Science - Animal (ASA) course is to expose students to agriculture, animal science, and related career options. Students participating in the ASA course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

# PRINCIPLES OF AGRICULTURAL SCIENCE - PLANT (ASP) 

Pathways: S\&H
Full Year
CIP 01.9999
1.00 Credit

Requirements: Sophomores, Juniors, \& Seniors
Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, the local, and the global economy. Lessons throughout the course will provide an overview of the field of agricultural science with a foundation in plant science. These lessons include working in teams and exploring hands-on projects. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers. Teachers are provided detailed professional development to facilitate instruction. Every lesson is aligned with national standards for agriculture, science, mathematics, and English language arts.

## Power Systems (Construction)

Grade Level: 10-12
1.0 Credits Full year

Credit Requirements: Sophomores, Juniors, \& Seniors
Students will be introduced into the trade areas of masonry, plumbing, electrical and carpentry. Students will learn basic theory in these areas and apply the theory to hands-on projects. Projects may include storage sheds, garages and laboratory exercises. Students will be able to enhance their skills and talents and find their likes and dislikes. Information will be provided on post-secondary technical schools that could provide further training towards a career. The goal of this course is to give the student a working knowledge of building construction, electrical wiring, basic plumbing, and masonry skills. The class will participate in the planning and building of a storage shed or other construction projects.

## Power Technology (Power Mechanics)

Grade Level: 11-12
Full year 1 credit
Credit Requirements: Juniors, \& Seniors
Students will be introduced to electric arc welding, oxy-acetylene welding, and plasma cutting. Students will work on individual projects that are made of steel.

LANDSCAPE DESIGN \& TURFGRASS MANAGEMENT Pathways: ET
semester course .5 credits
Credit Requirements: Sophomores, Juniors, \& Seniors
This course will deal with the design and installation of landscapes. Units of instruction will include computer aided landscape design, nursery plant identification and production, landscape tools, landscape maintenance, turfgrass management, plant diseases and pests. Students will be able to create blueprints and 3-D digital designs of residential and community landscapes and construct a landscape. Students with an interest in designs and plants will do well in this high demand field.

## Floriculture

Semester course . 5 credit
Credit Requirements: Sophomores, Juniors, \& Seniors
This course is centered on a student operated plant and floral shop. Students will learn the basics of floral design, care and handling of cut flowers and foliage, the use of equipment, supplies and tools needed in the floral industry.
This course involves the study of growing plants in the school greenhouses. Emphasis is placed upon the selection of exciting new plant varieties. Growing practices such as: nutrition, disease and insect control, light and temperature control, timing of the crops to coincide with holiday markets, and the analysis of cost of production is included in the greenhouse course. Students will also sell and display greenhouse plants in the garden shop. A basic understanding of growing media and greenhouse management is an important part of this area of instruction. Students gain practical experience in a student operated greenhouse and garden shop.

## Supervised Agriculture Experience Program

Credits: 1.0 Year long course
Grade Level: 9-12

Supervised agricultural experience (SAE) programs are teacher-supervised, individualized, hands-on, student-developed activities that give students real-world experience directly applicable to careers in the broad fields of agriculture. An SAE may involve student ownership of an agriculture-related enterprise or placement in an agriculture-related job, either at a job site or in a school agriculture laboratory. SAEs will be unique and vital components of your agricultural education program. Students will have an individual project that will be applied to their state FFA degree and proficiencies. Students will keep records of their time journals and finances.

## Food science

Grades 11-12
Credit Value 1
The course will explore Pennsylvania's food industry and the topics of relating science to the production and processing of food. Students will complete hands-on projects that will demonstrate the science behind food processing and preservation methods for home use.

## Environmental Science

Credit Value 1
Grades 10-12
This Science Exploration course is an examination of the science of environmental problems, processes, and solutions. Students will explore the interrelationships of the natural world, the environment, and the impacts of humans. Specific topics will include land, air, and water pollution; biodiversity; global climate change; energy; public health; and sustainability.


[^0]:    Algebra A
    Grade: 9
    Course 1 in Algebra I sequence
    Formerly Pre-Algebra 9
    Prerequisite: Common Core Math 8
    Algebra A is the first course in a sequence of three algebra-based courses to prepare students for the Keystone Algebra I exam. Topics may include but are not limited to: Operations with real numbers and expressions, linear equations and inequalities, functions, coordinate geometry, and data analysis.

