COURSE DESCRIPTIONS
2023-2024

Mount Union Area Jr/Sr High School
706 North Shaver Street
Mount Union, PA 17066

www.muasd.org

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PROMOTION & GRADUATION REQUIREMENTS

The Minimum number of credits needed for graduation at Mount Union Area High School is 25 credits. Seven full credit courses must be scheduled by each student in each grade. Under Chapter Four of the Pennsylvania Department of Public Education, specified courses listed below must be included in the 25 credits required for graduation in the 9th, 10th, 11th, and 12th grades. Physical education and health are required in the proper grade.

Required Courses	**Credits**
English (4 courses 9, 10, 11, 12)	4.00
Social Studies (3 courses)	3.00
Science (3 courses)	3.00
Mathematics (3 courses)	3.00
Health and Physical Education	1.50
Career Exploration	1.00
Electives	9.50
	25.00

SCHEDULE CHANGES

Students are highly encouraged to finalize their schedules during the previous school year, while school is in session. However, we realize that changes may need to be made over the summer or at the start of school. Therefore, the District will allow students to drop and add courses for academic reasons only. A Drop and Add Form must be completed, signed by the parent/guardian, and turned in to the Guidance Office by Friday of the first full week of school. All requests after this date will be denied.

Note:

- A freshman must earn 6 credits to be classified as a sophomore.
- A sophomore must earn 12 credits to be classified as a junior.
- A junior must earn 18 credits to be classified as a senior.
- A senior must earn 25 credits to graduate.
- Through Act 158 of 2018 and Act 6 of 2017, students graduating from a Pennsylvania public high school in 2023 or later will have the flexibility to meet statewide high school graduation requirements through one of five pathways that fully illustrate their college, career, and community readiness.
  1-Keystone Proficiency **Keystone Proficiency** remains a pathway to high school graduation for the graduating class of 2023 and beyond. Commonwealth students will *not* be required to pass the Keystone Exams (Algebra I, Literature, and Biology) in order to graduate; however, since most students will continue to participate in the Keystone Exams for federal accountability purposes, those achieving scores of Proficient or Advanced (a minimum scaled score of 1500 or higher) in each of the three Keystone Exams demonstrate Keystone Proficiency and meet statewide requirements for high school graduation.
  2-Keystone Composite Pathways Students achieving a minimum scaled score of less than 1500 on a Keystone Exam may meet statewide requirements under the new **Keystone Composite** Pathway provided:
  ü No score of Below Basic was earned for any Keystone Exam, a score of Proficient or Advanced was achieved on at least one Keystone Exam, and the composite score for all three Keystone Exams is 4452 or greater.
  3-CTE Concentrator Each student must meet locally established grade-based requirements for academic content associated with *every* Keystone Exam on which the student earned a score of Basic or Below Basic. *In addition* to local requirements, the student must be a Career & Technical Education (CTE) Concentrator. To meet evidentiary requirements under the **Career & Technical Education (CTE) Concentrator** Pathway, a student must attain an Industry-Based Competency Certification related to the program of study *or* demonstrate either 1) readiness for continued meaningful engagement in the program of study or 2) a high likelihood of success on an approved industry-based assessment.
  4-Alternative Assessment Each student must meet locally established grade-based requirements for academic content associated with *every* Keystone Exam on which the student earned a score of Basic or Below Basic. *In*

addition to local requirements, the student must successfully complete an alternative local assessment in each subject area not passed. Although the **Alternative Assessment** Pathway requires only one piece of evidence, students earning scores of Basic or Below Basic on two or more Keystone Exams may need to fulfill multiple conditions in order to meet the pathway requirement for that piece of evidence.

5-Evidence-Based Pathways Each student must meet locally established grade-based requirements for academic content associated with *every* Keystone Exam on which the student earned a score of Basic or Below Basic. *In addition* to local requirements, the student must provide pathway-related evidence demonstrating preparedness for postsecondary success. The **Evidence-Based** Pathway requires three pieces of evidence that reflect readiness for meaningful postsecondary engagement consistent with the student's goals and career plan – though no evidence under this pathway requires the fulfillment of multiple conditions associated with Keystone academic content (e.g., a score of 3 or higher on *any* AP Exam meets the criterion for one piece of evidence). However, as in Alternative Assessment and CTE Concentrator Pathways, students pursuing the Evidence-Based Pathway must meet locally established grade-based requirements for academic content associated with every Keystone Exam on which the student was less than proficient *in addition* to meeting evidentiary requirements for that pathway.

GRADING SYSTEM

Grading Scale 65% - 100%
Grades below 65% reflect unsatisfactory achievement; no credit will be awarded.

Letter grades and percentage grades will appear on report cards as follows:

A+	99-100	B+	90-91	C+	81-82	D+	72-73
A	95-98	B	86-89	C	77-80	D	68-71
A-	92-94	B-	83-85	C-	74-76	D-	65-67
						F	Under 65

Grade Point Average - GPA is the grade point average of all classes a student takes and receives a percentage grade. This grade point average is used to determine class rank, honor roll, and academic eligibility. GPA includes both weighted and non-weighted grades.

WEIGHTED GRADES

Certain courses offered at MUAHS consist of subject material that is more extensive and challenging than a general course. These courses are given weighted grades. Weighted grades are intended to:

Encourage students to enroll in more challenging courses,
Enable students in more difficult courses to have equal opportunities for awards, class rank, honor roll, etc.
Reward students for extra efforts required for the more rigorous courses.

Two levels of weighted grades exist - partial weighting and full weighting. Partial- weighted courses are subjects that are more rigorous than a general course but are not as difficult as the full-weighted courses. The full-weighted courses are Advanced Placement (AP) courses or the close equivalent.

The weighting of courses will not appear in the actual percentage reported as the student grade. It will appear in the Grade Point Average (GPA) reported for that course and will be averaged into the total GPA. The grade points assigned for weighted courses will be greater than the grade points in non-weighted courses. For instance, a 90% in a partial-weighted course would receive 3.55 grade points while a 90% in a non-weighted course would receive 2.80 grade points. A conversion chart will be made available to parents/guardians of students enrolled in weighted courses so that comparisons can be made.

All passing grades (65% or above) will be weighted. If a student fails (64% or below) the weighted subject for a marking period, he/she will not receive any weighting benefit. Failure of a marking period in a weighted course may result in an evaluation meeting involving student, parents, teacher, guidance and administration to determine if the student should remain in the course.
To be eligible to enroll in weighted courses, a student must meet the following guidelines:

- Students who wish to enroll in a course in a subject area (English, science) that carries the same weighting (partial to partial) must have either a minimum grade of 86% **or** have recommendation of subject instructors.

- Students who wish to enroll in weighted courses in a subject area that have a higher level of weighting (none to partial, partial to full) must have both a minimum grade of 86% **and** recommendations of subject instructors.

Students will schedule these courses prior to the end of the school year, but the enrollment criteria will be evaluated based upon final grades. Only grades for subjects taken at MUAHS will be weighted.

Weighted Grading Scale

Percent	Full	Partial	No Wgt
100	5.50	4.75	4.00
99	5.48	4.73	3.98
98	5.47	4.72	3.97
97	5.46	4.71	3.96
96	5.45	4.70	3.95
95	5.44	4.69	3.94
94	5.40	4.65	3.90
93	5.30	4.55	3.80
92	5.20	4.45	3.70
91	5.10	4.35	3.60
90	5.00	4.25	3.50
89	4.90	4.15	3.40
88	4.80	4.05	3.30
87	4.70	3.95	3.20
86	4.60	3.85	3.10
85	4.50	3.75	3.00
84	4.40	3.65	2.90
83	4.30	3.55	2.80
82	4.20	3.45	2.70
81	4.10	3.35	2.60
80	4.00	3.25	2.50
79	3.90	3.15	2.40
78	3.80	3.05	2.30
77	3.70	2.95	2.20
76	3.60	2.85	2.10
75	3.50	2.75	2.00
74	3.40	2.65	1.90
73	3.30	2.55	1.80
72	3.20	2.45	1.70
71	3.10	2.35	1.60
70	3.00	2.25	1.50
69	2.90	2.15	1.40
68	2.80	2.05	1.30
67	2.70	1.95	1.20
66	2.60	1.85	1.10
65	2.50	1.75	1.00

SUPPORT SPECIAL SERVICES & INDIVIDUAL EDUCATIONAL PROGRAM STUDENTS

Mount Union Area High School Students are provided support or special services. Accommodations may be provided when disadvantaged, disabled, or limited English-speaking students are enrolled in the courses.

******All course offerings are subject to change.**

ENGLISH DEPARTMENT

ENGLISH I (130) (130I) – Grade 9

This course covers basic skills in five areas: grammar, composition, literature, vocabulary, and research. Grammar studies include a review of basic elements, mechanics, usage, agreement, phrases, and clauses. Composition includes sentence structure, paragraph writing, and paragraph revision. Vocabulary will be studied through weekly lessons.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 3rd Course, Elements of Writing, 3rd Course, Warriner's Vocabulary Workshop, 3rd Course.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACADEMIC ENGLISH I* (131) - Grade 9

This course is designed for students who have expressed an interest in post-secondary academic education. Coursework will cover skills in five areas: grammar, composition, literature, vocabulary, and research. Grammar studies include a review of basic elements, mechanics, usage, agreement, phrases, and clauses. Composition includes sentence structure, paragraph writing, paragraph revision, and responding to literature. Vocabulary will be studied through weekly lessons. Teacher recommendation required.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 3rd Course Holt, Elements of Writing, 3rd Course, Shostak's Vocabulary Workshop, Vocabulary PowerPlus for College and Career Readiness, 9th Grade
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENGLISH II (140) (140I) – Grade 10

This course covers basic skills in grammar, literature, composition, research, and vocabulary. Grammar studies include sentence construction and order, usage, and mechanics. Literature involves a general study of literary forms and techniques. Composition introduces the students to other forms of writing as well as refining known techniques in paragraphing, essay writing, and composition. Vocabulary skills continue to be developed through weekly lessons. Research skills are practiced and organizational skills in thought and writing are developed.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 4th Course, Holt, Element of Writing, 4th Course
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACADEMIC ENGLISH II* (141) – Grade 10

This course is designed for students who have expressed an interest in post-secondary, academic education. This course covers skills in grammar, literature, composition, research, and vocabulary. Grammar studies include sentence construction and order, usage, and mechanics. Literature involves an in-depth study of literary forms and techniques. Composition introduces the students to other forms of writing, as well as refining known techniques in paragraphing, essay writing, and composition. Vocabulary skills continue to be developed through weekly lessons. Research skills are practiced, and organizational skills in thought and writing are developed. Teacher approval required.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 4th course, Elements of Writing, 4th Course, Shostak's Vocabulary Workshop, Vocabulary PowerPlus for College and Career Readiness, 10th Grade
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENGLISH III (150) (150I) – Grade 11

This course covers basic skills in five areas: grammar, literature, research, composition, and vocabulary. Grammar studies include the study of sentence structure, usage, and mechanics. Literature involves the study of various literary forms as well as a chronological study of American literature. Composition allows the student to improve skills in paragraphing, essay and summary writing, and general organizational skills in writing and thought. Vocabulary study on a weekly basis.
TEXTBOOK: Elements of Literature, 5th Course, Warriner's English Grammar and Composition, Elements of Writing, 5th Course,

LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACADEMIC ENGLISH III* (151) – Grade 11

This course is designed for students who plan to attend a post-secondary institution. This course covers advanced skills in five areas: grammar, literature, research, composition, and vocabulary. Grammar studies include the review of sentence structure, usage, and mechanics. Literature involves the study of various literary forms as well as a chronological study of American literature. Research involves mastery of the library and the writing of a research paper. Composition stresses improvement in paragraphing, essay and summary writing, specific organizational skills in writing and thought as well as analysis and synthesis. Vocabulary study on a weekly basis. Teacher approval required.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 5th course, Elements of Writing, 5th Course, Vocabulary PowerPlus for College and Career Readiness, 11th Grade
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENGLISH IV (160) (160I) – Grade 12

This course includes three basic sections: usage and composition, literature, and research. The usage/composition aspect of the course serves to review the principles of usage and sentence structure as the foundation for comprehension and writing skills. The research aspect of the course involves instruction in the proper method of writing a research paper. The literature section of the course is a chronological study of English literature from the Anglo-Saxon period to the twentieth century and may include selected outside reading.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 6th Course,
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACADEMIC ENGLISH IV* (161) – Grade 12

This course is directed at those students who plan to attend a post-secondary institution. This course includes three basic sections: usage and composition, literature, and research. The usage/composition aspect of the course serves as review the principles of usage and sentence structure as the foundation for comprehension and writing. The research aspect of the course involves instruction in the proper method of writing a research paper and the actual writing of a research paper. The literature section of the course is a chronological study of English literature from the Anglo-Saxon period to the twentieth century and selected outside reading. Teacher approval required.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Elements of Literature, 6th course, Warriner's English Grammar and Composition, 6th Course, Vocabulary PowerPlus for College and Career Readiness, 12th Grade
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENGLISH COMPOSITION I** (E001) Dual Enrollment – Grade 11 Cohort Penn Highlands

English Composition I will emphasize the techniques of writing expository essays with stress upon careful thinking, word choice, sentence structure, and methods of organization. Students practice the writing of clear, coherent, and unified paragraphs and essays. Editing skills and the use of correct grammar and mechanics are also emphasized. Students are taught research skills and are required to write an argumentative research paper. This is the standard college English composition course. This class cannot replace an English credit.
PREREQUISITE: Placement testing
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

AP ENGLISH ** (162) – Grade 12

Advanced Placement in English is designed to engage students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and skilled writers of narrative, explanatory, expository, and argumentative form. The overall goal of this class is to enable students to write effectively and confidently in their future courses. Teacher approval is required for admission to this course. End of year AP test.

LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENGLISH COMPOSITION II* (E002) Dual Enrollment – Grade 12 Cohort Penn Highlands

Studies in Literature emphasizes the study of literary terms and techniques frequently used in literature. This course introduces students to major themes found in fiction, poetry, and drama. Students are required to read various types of literature and must be able to respond to their readings in well-developed essays and in an analytical research paper, as well as to participate in class discussions. This is a standard college-level introductory literature course.
PREREQUISITE: Placement testing
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

PUBLIC SPEAKING (ELE002) – Grades 10, 11, 12

This course provides basic speech/communication skills. Included will be verbal and nonverbal communication skills, listening skills, interpersonal communication skills, and public speaking skills. The student will deliver approximately 6 speeches throughout the year. Bookwork covering speech activities will be covered with quizzes and discussions concerning the text. Students must have successfully complete English I to register for this course.
PREREQUISITE: English I
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Elective Credit

JOURNALISM (166) – Grades 10, 11, 12

This course emphasizes writing style and technique as well as production values and organization. Students will be introduced to the concepts of newsworthiness and press responsibility, and they will develop skills in writing and editing stories, headlines, and captions. Students will also learn principles of production design, layout, and printing, Photography, photojournalism, and digital technology skills will also be included.
PREREQUISITE: English I
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Elective Credit

MATHEMATICS DEPARTMENT

ALGEBRA I (330) (330h*)- Grade 9

In Algebra I students will study patterns that can be extended, described, and generalized and represent and analyze relationships using words, tables, graphs, and equations. Students will also study families of functions that exhibit properties and behaviors that can be recognized across representations. All students enrolled in Algebra I will take the Algebra I Keystone Exam near the end of the course.
TEXTBOOK: Algebra 1: Common Core, Savvas Learning Company
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ALGEBRA 1A (382) – Grade 9

A scientific calculator is recommended for this class. This course introduces the student to algebraic reasoning as applied to operations with real number expressions, linear equations and inequalities and data analysis with an emphasis on real world applications. It also is a course designed to help students fine-tune their pre-algebra skills. The students will see applications of math topics through problem solving, technology and cooperative learning activities. Students will ***not*** take the Keystone Algebra Exam until the completion of Algebra 1B.
Enrollment in this class is by teacher placement only. Students who have passed Algebra 1 or higher will not be allowed to take this course.
CREDIT TO BE AWARDED: One Credit

Algebra 1B (383)– Grade 10

A scientific calculator is recommended for this class. This course is a continuation of Algebra 1A. Students will continue their algebraic reasoning and apply it to functions, coordinate geometry, systems of linear equations and inequalities. The students will see applications of math topics through problem solving, technology, and cooperative learning activities. Students ***will*** take the Keystone Algebra Exam once they have completed BOTH Algebra 1A and Algebra 1B. Enrollment in this class is by teacher placement only. Students who have passed Algebra 1 or higher will not be allowed to take this course.
PREREQUISITE: Algebra 1A and Teacher recommendation
CREDIT TO BE AWARDED: One credit

ALGEBRA II (340) – Grade 10, 11, 12

Algebra II includes but is not limited to the following areas: basic concepts of Algebra, inequalities, linear equations and functions, products and factors of polynomials, rational expressions, irrational and complex numbers, quadratic equations and functions, variations and polynomial equations, number systems and non-linear expressions, and data analysis.
PREREQUISITE: Algebra I and Teacher Recommendation. Students may take concurrently with Geometry with teacher recommendation.
TEXTBOOK: Algebra 2: Common Core, Savvas Learning Company
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ALGEBRA II* (341) – Grade 9, 10, 11, 12

Algebra II includes but is not limited to the following areas: basic concepts of Algebra, inequalities and proofs, linear equations and functions, products and factors of polynomials, rational expressions, irrational and complex numbers, quadratic equations and functions, and variations and polynomial equations.
PREREQUISITE: Algebra I and Teacher Recommendation. Students may take concurrently with Geometry with teacher recommendation.
TEXTBOOK: Algebra 2: Common Core, Savvas Learning Company
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

GEOMETRY (MA014) – Grade 10, 11, 12

Geometry topics include: the properties of circles, spheres, and cylinder; polygons and polyhedral; congruence, similarity, and informal proofs; coordinate geometry; measurements of two-dimensional shapes and figures; measurements of three-dimensional shapes and figures.
PREREQUISITE: Algebra I, Algebra II and Teacher Recommendation. Students may take concurrently with Algebra II with teacher recommendation.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS:
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

GEOMETRY/TRIGNOMETRY* (384) – Grade 10, 11, 12

Geometry topics include: the properties of circles, spheres, and cylinder; polygons and polyhedral; congruence, similarity, and informal proofs; coordinate geometry; measurements of two-dimensional shapes and figures; measurements of three-dimensional shapes and figures, and right triangles.
Trigonometry topics include: trigonometric functions; right triangle trigonometry; radian measure and circular functions; trigonometric graphs, identities, and equations; vectors; and polar coordinates
PREREQUISITE: Algebra I, Algebra II and Teacher Recommendation. Students may take concurrently with Algebra II with teacher recommendation.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS:
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE ALGEBRA* (MA005) – Grade 10, 11, 12

College Algebra includes complex algebraic skills. Students enrolled in this course should have a strong background in basic and intermediate algebra. Topics include a more in-depth study of expressions, solving equations, solving inequalities, circles, and a detailed study of functions and their graphs including polynomial, rational, exponential, and logarithmic functions.
PREREQUISITE: Algebra I, Algebra II, Geometry, and Teacher Recommendation. Students may take concurrently with Geometry with teacher recommendation.
TEXTBOOK: Precalculus, 6e, Blitzer
LENGTH OF COURSE: One year
CREDIT TO BE AWARDED: One Credit

COLLEGE ALGEBRA** Dual Enrollment (MA005DE) – Grade 10, 11, 12

College Algebra includes complex algebraic skills. Students enrolled in this course should have a strong background in basic and intermediate algebra. Topics include a more in-depth study of expressions, solving equations, solving inequalities, circles, and a detailed study of functions and their graphs including polynomial, rational, exponential, and logarithmic functions. Placement test required.
PREREQUISITE: Algebra I, Algebra II, Geometry, and Teacher Recommendation. Students may take concurrently with Geometry with teacher recommendation.
TEXTBOOK: College Algebra, 5e, Blitzer
LENGTH OF COURSE: One year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

PRE-CALCULUS w/Trigonometry* (392) – Grade 10, 11, 12

Pre-Calculus topics include, but are not limited to: polynomial, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic trigonometry; limits and introductory calculus concepts.
PREREQUISITE: Algebra I, Algebra II, Geometry and Teacher Recommendation.
TEXTBOOK: Pre-Calculus with Limits, A Graphing Approach, 7e, Larson
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

AP CALCULUS** (393) – Grade 12

AP Calculus involves the study of: limits and their properties; differentiation; applications of differentiation; integration; logarithmic functions, exponential functions, and other transcendental functions; applications of integration; integration techniques and L' Hospital's Rule. End of Year AP Test.
PREREQUISITE: Pre-Calculus and Teacher Recommendation.
TEXTBOOK: Calculus of a Single Variable (7th Ed), Houghton Mifflin
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE STATISTICS* (2203) – Grade 11, 12

Students will be exposed to concepts and tools in order to collect, analyze, and draw conclusions from data. Units of study include summary statistics, graphical display, experimental design, normal distributions, and inferential statistics. Test of significance as well as confidence interval will be addressed in the inferential statistics unit.
PREREQUISITE: College Algebra or Pre-Calc with 86% or better. Additionally, a score of proficient or advanced on the Algebra I Keystone Exam is required.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Course currently pending approval from Penn Highlands

COLLEGE STATISTICS** (2203DE) – Grade 11, 12

Students will be exposed to concepts and tools in order to collect, analyze, and draw conclusions from data. Units of study include summary statistics, graphical display, experimental design, normal distributions, and inferential statistics. Test of significance as well as confidence interval will be addressed in the inferential statistics unit.
PREREQUISITE: College Algebra or Pre-Calc with 86% or better. Additionally, a score of proficient or advanced on the Algebra I Keystone Exam is required.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands
*Course currently pending approval from Penn Highlands

APPLIED MATHEMATICS I (MA0017) – Grade 12

Applied Mathematics is intended primarily for students who desire a development of practical real-world math, for those students considering a job immediately following high school. Topics will include but not limited to, engineering, finance, construction, taxes, and electrical.
Enrollment in this class is by Teacher Recommendation only.
LENGTH OF COURSE: One Year
CREDIT AWARDED: One Credit

BUSINESS MATH (570)– Grade 11, 12

Business Mathematics is a course that covers basic mathematical concepts and applies them to common personal and business situations, such as banking, payroll, and taxes. Students will learn to use mathematics as a tool and develop skills through practical activities and applications. These practices will help students prepare for real world events and use mathematics in their personal and business lives.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Mathematics for Business
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

SCIENCE DEPARTMENT

SCIENCE 9 (225) (225I) - Grade 9

This course is designed to encourage and engage student inquiry to promote science literacy, critical thinking and problem solving. A wide range of activities apply knowledge of scientific investigation with elements of experimental design, pattern recognition, and system analysis. Critical components include observation skills, data collection and interpretation, measurements, variable recognition, communication techniques, and real-world application. Topics include measurements, classification of matter and properties, phases of matter, elements, solutions, motion, forces, energy, carbon chemistry, and environmental topics.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Physical Science: Concepts in Action, Prentice Hall
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACCEL SCIENCE 9* (226) – Grade 9

This course is intended for the 9th grade student who has interest in post-secondary science areas. The course is designed to encourage and engage student inquiry to promote science literacy, critical thinking, and problem solving. The topics include measurements, classification of matter and properties, phases of matter, elements, solutions, motion, forces, simple machines, energy, carbon chemistry, polymers, and environmental topics. Emphasis is placed on faster pace and independent work. A major investigation project will be evaluated with each area of study.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Physical Science: Concepts in Action, Prentice Hall
PREREQUISITES: Teacher Recommendation
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

BIOLOGY (250) (250I)– Grade 10

The course content will include: the science of biology, cell structure and function, cellular respiration, cell growth and division, genetics, DNA, RNA, evolution, and ecology. Depending on pace of curriculum, there is also discussion of microorganisms and fungi, plants (a brief look), invertebrates, vertebrates (reptiles, fish, birds, mammals, and amphibians) and dissections. Also, we will cover issues involved in ecological science.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Prentice Hall Biology book, lab sheets, handouts
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACCELERATED BIOLOGY* (251) – Grade 10

This course is intended for the 10th grade student who has an interest in the science areas in college or as a career. The topics studied are the same with extra emphasis on the writing of lab reports, papers, speeches, and journal reviews which are essential skills required in college classes.
PREREQUISITES: At least 92% in Science 9, or At Least 83% in Accelerated Science or Teacher Recommendation
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Prentice Hall Biology book, lab sheets, handouts
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

SCIENCE 11/STEM (SCOO7) – Grade 11, 12

The course content will include: the science of biology, cell structure and function, cellular respiration, photosynthesis, cell growth and division. In addition, we will focus on test preparation and integrated project-based assessment. STEM is designed to empower students through critical thinking, collaboration, and innovation. The content is based on the acronym STEM and will rely on project-based assessments that encompass science, technology, engineering and mathematics. Topics for the course include but are not limited to utilizing common objects, robotics, digital design/coding, designing solutions for local and world issues, application of solar panels, 3D printing, and preparing for future jobs that are based on STEM.
TEXTBOOK AND /OR SUPPLEMENTARY MATERIALS: lab sheets, handouts, online course material
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CHEMISTRY w/Lab* (270) – Grade 11

This course is for the academic 11th grade student. It will include the following subjects: matter, measurement, nomenclature, chemical interactions (quantitative-qualitative), heat, atomic and molecular structure and states of matter and gas laws. Emphasis is placed on developing a systematic process for problem solving and hands-on experiences. This class is partially weighted, and therefore, requires some work to be completed outside of classroom time.
PREREQUISITES: At least a 65% in Accelerated Biology, 74% in Biology or Teacher Recommendation
TEXTBOOK: Introductory Chemistry; Zumhadl/DeCoste; 6th Edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACCELERATED CHEMISTRY w/Lab*– (271) – Grade 11

This course is intended for the junior student who has an interest in the math or science areas. This course includes the following topics: matter, measurement, nomenclature, chemical interactions, heat, atomic and molecular structure, periodic law, and bonding, states of matter, gas laws and oxidation-reduction. The course is designed to go into greater detail and proceed at a faster pace. Problem solving, hands-on experience and scientific procedures are emphasized. Scheduling of this class involves a double lab period. This class is partially weighted and will require the student to spend time outside of class completing assignments.
PREREQUISITE: At least 92% in Biology or At Least 83% in Accelerated Biology or Teacher Recommendation
TEXTBOOK: Chemistry Zumdahl/Zumdahl 10th Edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACCELERATED CHEMISTRY w/Lab* Dual Enrollment– (271DE) – Grade 11

This course is intended for the junior student who has an interest in the math or science areas. This course includes the following topics: matter, measurement, nomenclature, chemical interactions, heat, atomic and molecular structure, periodic law, and bonding, states of matter, gas laws and oxidation-reduction. The course is designed to go into greater detail and proceed at a faster pace. Problem solving, hands-on experience and scientific procedures are emphasized. Scheduling of this class involves a double lab period. This class is partially weighted and will require the student to spend time outside of class completing assignments.
PREREQUISITE: At least 92% in Biology or At Least 83% in Accelerated Biology or Teacher Recommendation
TEXTBOOK: Chemistry Zumdahl/Zumdahl 10th Edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Mount Aloysius College

SENIOR EARTH/ENVIRONMENT SCIENCE (SC001) – Grade 12

Senior earth and environmental science are specifically designed to provide a general science course with an emphasis on earth and environmental topics promoting a greater awareness and understanding of the interactions of people and their environment. The course will include three units. The earth resource unit includes basic ecology, forest resources, metallic and nonmetallic resources of Pennsylvania. Energy resource unit includes fossil fuels, alternative energy resources and nuclear chemistry. The environmental unit includes aquatic ecosystems, chemistry of water, water quality, climate change, acid rain, pollution and watersheds. Case studies will provide an opportunity to examine practical problems associated with current environmental issues.
TEXTBOOK: Environmental Science (LeBel)
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

PHYSICS** (290) – Grade 11, 12

Physics is a course that deals with the fundamental principle that govern the behavior of our physical world. The goals are to indicate applications of physics principles in real-life situations, foster development of problem-solving skills and to encourage individual time management. This course is fully weighted and requires work to be completed outside of class time.
PREREQUISITE: Must have Algebra II credit **and** Teacher Recommendation
TEXTBOOK: College Physics, Serway & Faughn, 7th edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

AP CHEMISTRY/Lab** (281) – Grade 12

This course is designed for the academic senior who intends to pursue a science major in college or health related fields. This course is a continuation of first-year chemistry and will include the following topics: gas laws, colligative properties, acid/base theory, kinetics, equilibrium, qualitative analysis, electrochemistry and organic chemistry. The student will be introduced to various forms of chemical instrumentation, will plan and implement lab exercise, and participate in a class project. This course culminates with the AP Chemistry Exam which all students must take. Scheduling of this class involves a double lab period.
PREREQUISITE: At least 83% in Chemistry or at least 74% in Accelerated Chemistry and Teacher Recommendation
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Chemistry, Zumdahl/Zumdahl 10th edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE CHEMISTRY/Lab** (281DE) Dual Enrollment– Grade 12

This course is designed for the academic senior who intends to pursue a science major in college or health related fields. This course is a continuation of first-year chemistry and will include the following topics: gas laws, colligative properties, acid/base theory, kinetics, equilibrium, qualitative analysis, electrochemistry and organic chemistry. The student will be introduced to various forms of chemical instrumentation, will plan and implement lab exercise, and participate in a class project. Scheduling of this class involves a double lab period.

PREREQUISITE: At least 83% in Chemistry or at least 74% in Accelerated Chemistry and Teacher Recommendation
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Chemistry, Zumdahl/Zumdahl 10th edition
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Mount Aloysius College

ADVANCED BIOLOGY* (260) – Grade 12

Advanced Biology is a course designed to cover the fundamental principles of biology, with an emphasis on laboratory and field techniques. Course topics include taxonomy, epidemiology, biotechnology, molecular biology, nutrition, and animal behavior. The writing of formal lab reports papers will be emphasized along with the reading of several science-based novels. The use of live animals may be required in class. Students will be required to keep an ongoing notebook and may be evaluated with both a midterm and final exam.
PREREQUISITE: At least 74% in Chemistry or at least 65% in Accelerated Chemistry, and Teacher Recommendation
TEXTBOOK: McGraw Hill Biology, 9th edition, (Sylvia S. Mader)
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ENVIRONMENTAL GEOLOGY (SC006) – Grade 12

Environmental Geology involves the relationship between geologic principles and human interaction. Basic foundation of geology topics includes topographic maps, minerals and rocks, strata, plate tectonics, historical geology and paleontology. Earth processes and natural hazard topics include earthquakes, volcanoes, rivers, groundwater, and landslides. Resources and pollution topics will focus on topics including water resources, pollution, energy, soils, global climate change, land use planning. The course will include field work and a water quality monitoring program.
PREREQUISITE: ONE CREDIT BIOLOGY, ONE CREDIT CHEMISTRY, TEXTBOOK/SUPPLEMENTARY MATERIAL: PHYSICAL GEOLOGY LAB MANUAL, ENVIRONMENTAL SCIENCE
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ANATOMY* (SC005) – Grade 11, 12

This course is for those students interested in pursuing science and fields. Anatomy and physiology are a discussion and laboratory-based study of the human body. Topics studied will include tissues, organs and structures, and the major body systems and how they are related and interconnected. This class is designed as a college preparatory class for majors in biology and the medical field. Projects will include dissection of a fetal pig as well as other preserved organs, writing a formal research paper, and medical career exploration.
PREREQUISITE: Completion of Biology with a B average or better.
TEXTBOOK/SUPPLEMENTARY MATERIAL: Marieb - Essentials of Human Anatomy & Physiology
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Elective Credit

SOCIAL STUDIES

U.S HISTORY I (SS0012) (SS0012i) – Grade 9

This course is a general United States history course which starts with British colonization in North America and ends with the Revolutionary War. Major topics include: the founding of British colonies, life in the British colonies, the French and Indian War, the Revolutionary War, the Constitution, the early United States, War of 1812, Jacksonian Era, United States expansion into the west, and causes of the Civil War. Special emphasis will be placed upon the geographical, economic, political, and social aspects that played a role in each of the historical topics listed above. The students will use such technological items as laptops, projectors, and smart boards to explore and learn the material. This course is required for graduation and must be taken by sophomores.
TEXTBOOKS AND/OR SUPPLEMENTARY MATERIALS: All coursework is completed on Microsoft Teams
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE US HISTORY I* (AD0002DE) – Grade 9, 10, 11, 12

HIS 100 College Level Penn Highlands Course

This course is a college level United States history course which starts with early Native American Cultures and ends with the Reconstruction Period after the Civil War. Major topics include: early Native American cultures, the Age of Exploration, the Spanish American Empire, the founding of British colonies, life in the British colonies, the French and Indian War, the Revolutionary War, the formation of the United States Constitution and Government, the War of 1812, the Jacksonian Era, United States expansion into the west, the Civil War, and the Reconstruction Period. Special emphasis will be placed upon the geographical, economic, political, and social aspects that played a role in each of the historical topics listed above. The students will use technological items such as laptops, projectors, and smart boards to explore and learn the material.
SPECIAL NOTE TO STUDENTS AND PARENTS OR GUARDIANS: Registration and payment to Penn Highlands College must be made under the requirements set forth by Penn Highlands College. Mount Union Area School District is not responsible for a student's registration with Penn Highlands College or payment being rendered. Please contact the guidance office for how to contact Penn Highlands College. A student does not have to register at or take this course through Penn Highlands College and can simply take the course as a social studies credit at Mount Union Area High School.
TEXTBOOKS AND/OR SUPPLEMENTARY MATERIALS: All coursework is completed on Microsoft Teams.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

US HISTORY II (SS0013) (SS0013i) – Grade 10, 11

This course starts with an overview of the Civil War and continues through World War II America. The course is a general U.S. history course which deals with domestic and foreign issues of this period. Current events as they relate to the specified areas will be mentioned and/or dealt with. Students will work with technological is items such as laptops, projectors, and smartboards, to explore and learn the material. This course is required for graduation and must be taken by juniors.
TEXTBOOK: All coursework is completed on Microsoft Teams
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

WORLD HISTORY (SS0011) – Grade 11

World History will focus on the development and impact of western civilization in the "Modern Age." The focus will be on world history from 1450 AD to the present. Units will include Renaissance/Reformation, The Age of Absolutism, The Enlightenment, The French Revolution, Industrial Revolution, Global Age, World War I and the interwar period, World War II and its aftermath, The Cold War and the rise of Communism, and present contemporary Global Issues.
TEXTBOOK: TBD
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE PSYCHOLOGY* (SS011) – Grade 11, 12

This course is a general introduction to the scientific study of the brain, behavior, and mental processes of humans and animals, with emphasis on the goals of psychology: to describe, explain, predict, and control behavior. Students examine the substance of psychology such as biopsychology, sensation and perception, learning, memory, cognitive processes, affective behaviors, and mental illness through an examination of the theories, principles, and methods of research used in the field. Examples and applications enable the student to acquire the elements of critical thinking as adapted to the research environment. Students produce an APA formatted research paper. This course applies the fundamental principles of psychology as a natural science. Students explore current research through reading empirical research and write an APA formatted analytic research paper.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: All coursework is completed on Microsoft Teams
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE PSYCHOLOGY* (SS011DE) Dual Enrollment– Grade 11, 12

PSY100 General Psychology College Level Penn Highlands Course

This course is a general introduction to the scientific study of the brain, behavior, and mental processes of humans and animals, with emphasis on the goals of psychology: to describe, explain, predict, and control behavior. Students examine the substance of psychology such as biopsychology, sensation and perception, learning, memory, cognitive processes, affective behaviors, and mental illness through an examination of the theories, principles, and methods of research used in the field. Examples and applications enable the student to acquire the elements of critical thinking as adapted to the research environment. Students produce an APA formatted research paper. This course applies the fundamental principles of psychology as a natural science. Students explore current research through reading empirical research and write an APA formatted analytic research paper.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: All coursework is completed on Microsoft Teams
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

AMERICAN GOVERNMENT/CIVICS (445) – Grade 12

This course will introduce the major ideas, institutions, and issues in American government and politics. The focus is on how the structure of our political system influences the practice of politics at the national level -- the ongoing struggles among competing groups and individuals for influence over government activities and public policy.

We will examine the principles underlying the constitutional framework of American government and will analyze the three branches (Congress, the Judiciary, and the Executive) while trying to understand the advantages and problems inherent in a system of "checks and balances."

We will also consider important extra-governmental actors, such as political parties, interest groups, and the media. In the final part of the course, we will discuss important issues of public policy and study the major debates and divisions over where America is headed. Students will use laptops, smartboards, and projectors to learn the material.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: American Government-The Republic in Action Harcourt, *Brace and Jovanovich* to American Government, Prentice Hall.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

PSYCHOLOGY (SS009) – Grade 12

This an elective course that is geared towards but not limited to college bound students. The topics that will be covered in this course are: an introduction to psychology and the history of psychology, psychobiology, how people learn, memory and thought, motivation and emotion, states of consciousness, motivation and emotion, mental disorders, personality, and social psychology. The students will use such technological items as laptops, projectors, and smart boards to explore and learn the material.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: All coursework is completed on Microsoft Teams
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

WORLD LANGUAGE

World Language courses are offered online through the virtual academy. Please reference the Academy of Customized Learning section for online course request procedures.

American Sign Language I A	French I A	German I A	Latin I A	Spanish I A
American Sign Language I B	French I B	German I B	Latin I B	Spanish I B
American Sign Language II A	French II A	German II A	Latin II A	Spanish II A
American Sign Language II B	French II B	German II B	Latin II B	Spanish II B
American Sign Language III A	French III A	German II Honors A	Latin III A	Spanish III A
American Sign Language III B	French III B	German II Honors B	Latin III B	Spanish III B
	French III Honors B	German III A		Spanish IV A
	French III Honors A	German III B		Spanish IV B
		German III Honors A		
		German III Honors B		

AGRICULTURAL SCIENCES DEPARTMENT

AGRICULTURE COMPLETERS AND CONCENTRATORS WILL TAKE THE NOCTI TEST IN GRADE 12
PROGRAM STARTS IN THE 9TH GRADE

RECOMMENDED COURSE SEQUENCE

9th (hours)	10th (hours)	11th (hours)	12th (hours)
Introduction to Ag Science (129)	Food Science (129)	Wildlife Management (129)	Farm Business Management (129)
Animal Science I (129)	Animal Science II (129)	Vet Science (129)	FFA Leadership (129)
Horticulture I (129)	Horticulture II (129)	Small Gas Engines (129)	Ag Mechanics II (129)
Intro to Wood Technology (129)	Ag Mechanics I (129)	Cabinet Making (129)	Advanced Wood Technology (129)
Agribusiness Systems Online	Agribusiness Systems Online	Agribusiness Systems Online	Agribusiness Systems Online
Power Structural & Technical Systems Online	Power Structural & Technical Systems Online	Power Structural & Technical Systems Online	Power Structural & Technical Systems Online

Supervised Agriculture Experience (SAE) I - IV – only offered upon teacher approval

ANIMAL SCIENCE I (681) – Grade 9, 10, 11

This course will explore each species of animal livestock and the importance of livestock today. Instruction will pertain to in-depth study of the various species of large animal livestock. As well as animal health, nutrition, reproduction, significant breeds, career opportunities, and veterinary technologies. Students will study each of the animal agriculture sectors across the United States and identify areas where specific animal industries are concentrated. Evaluation of livestock for breeding and marketing purposes as well as marketing strategies will also be covered. In addition, students will explore connections between the Animal Science lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

HORTICULTURE I (AG002) – Grade 9, 10, 11

Students in the Horticulture class will explore all areas of horticulture including greenhouse production and floral design. Students will have the opportunity to work in the school greenhouse, work outside on the school grounds, and design projects for the Pennsylvania Farm Show. Horticulture related topic as well as participate in designing and building a Horticulture exhibit for the PA Farm Show. In addition, students will explore connections between the Horticulture lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

INTRODUCTION TO AGRICULTURE SCIENCES (AG0015) _ Grade 9, 10

The Introduction to Agricultural Sciences course is designed to teach essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Basic personal and community leadership and safety, and agricultural mechanical technology are included as a part of the instructional program. Each student is expected to design and participate in a supervised agricultural experience. Public speaking and other basic leadership skills will also be covered. In addition, students will explore connections between the Intro to Ag Sciences lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

INTRO TO WOOD (IA009) – Grade 9, 10, 11, 12

Students enrolled in this course will learn the process of project design, materials selection, materials purchasing, wood joinery, and finishing. A variety of production methods using general wood working tools, machines, processes and the related safety precautions. will be utilized to produce an individual student project. In addition, students will explore connections between the Intro to Wood Technology lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
TEXTBOOKS: Woods Technology and Processing, Fairer
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
CLASS LIMIT: 15

AGRICULTURE MECHANICS I (AG0016) - Grade 10, 11, 12

This laboratory course is designed to provide students with introductory level experiences in selected major areas of agricultural mechanics technology. It will prepare students for careers related to the construction, operation, and maintenance of equipment used by the agriculture industry. Topics will include safety, power tools, electrical systems, plumbing, concrete, and basic construction. In addition, students will explore connections between the Agriculture Mechanics lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
CLASS LIMIT: 15
LENGTH OF COURSE: One year
CREDIT TO BE AWARDED: One Credit

ANIMAL SCIENCE II (AG004) - Grade 10, 11, 12

This course will explore all aspects of animal agriculture from animal husbandry techniques and genetics to anatomy/physiology, feeding/nutrition, marketing, and the slaughtering or other uses of livestock. Feed identification and disease control will also be explored. It will also provide insight into the world of fish and wildlife as related to agriculture. Hands -on activities including dissections will be a part of this course. In addition, students will explore connections between the Animal Science lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
PREREQUISITE: Animal Science I and Teacher Recommendation
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CABINET MAKING (IA010) – Grade 10, 11, 12

An instructional program that prepares individuals to apply technical knowledge and skills in the production of a cabinet product to include casework, web frames, raised panel doors, moldings, drawers, and a variety of jointing methods. Instruction includes training in cutting, shaping, assembling parts, using hand tools, woodworking machines and installing hardware. Instruction also includes planning layouts, blueprint reading, drafting and pattern layout, and knowledge of practical uses and identification of various kinds of woods. In addition, students will explore connections between the Cabinet Making lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
PREREQUISITE: Intro to Production
TEXTBOOK: Modern Cabinetmaking, Umstattd/Davis
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
CLASS LIMIT: 15

FFA LEADERSHIP AND COMMUNICATIONS (AG005) – Grade 10, 11, 12

Want to work on interpersonal skills and become a young leader? Need to build your communication skills? This course focuses on both. Students in this class will complete a variety of units including communications and public speaking, parliamentary procedure, and responsibilities of officers in specific organizations. Students will focus on job readiness skills and learning to work as a leader and develop skills to also work as a team player when needed.
PREREQUISITE: None
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
LIMIT: 18

FOOD SCIENCE (AG0013) – Grade 10, 11, 12

Food Science students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. Students will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Students will also explore basic food science skills, nutrition concepts, management skills, preparation techniques, foreign foods, and career options. Emphasis will be placed on exploration of food from the farm field to the processing plant to the kitchen table. Preference will be given to students who have been previously enrolled in Agriculture Education courses. In addition, students will explore connections between the Food Science lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
CLASS LIMIT: 15
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One credit

HORTICULTURE II (AG003) – Grade 10, 11, 12

This course covers instruction that expands scientific knowledge and skills to include more advanced techniques and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production. Looking into greenhouse design as well as watering systems and light effects. Students will also learn basic landscape design and advanced floral design. In addition, students will explore connections between the Horticulture lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
PREREQUISITE: Horticulture I
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One credit

SMALL GAS ENGINES (AG0016) - Grade 10, 11, 12

This course offers an intensive study of the operation, maintenance, and repair of small gasoline engines. Instructional topics include principles of operation of internal combustion engines, repair and service procedures, and disassembly, overhaul, and reassembly. Instruction may also include the operation of two-cycle and four-cycle engines commonly found on lawn mowers, garden tractors, snow blowers, rotary tillers, chainsaws, and other equipment. Additionally, one unit of FFA

and basic leadership principles will be taught. In addition, students will explore connections between the Small Gas Engines lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
CLASS LIMIT: 15
LENGTH OF COURSE: One year
CREDIT TO BE AWARDED: One Credit

VETERINARY SCIENCE (AG0014)– Grade 10,11,12

This course covers topics relating to anatomy and physiology of livestock and companion animals. Students will learn topics such as types of diseases, transmission, symptoms and treatments. They will also practice basic clinical procedures such as administering medicine, bandaging and suturing wounds. Students will learn the basics of a physical exam and the signs of an ill animal. Students will have the opportunity to use equipment used in the lab/clinic. In addition, students will explore connections between the Vet Science lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
PREREQUISITE: Animal Science 1 or teacher recommendation
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

WILDLIFE MANAGEMENT (AG0012) – Grade 10, 11, 12

This course covers topics relating to the history of wildlife management in Pennsylvania, laws protecting wildlife and studies in identification, propagation and habitats of fish, birds, reptiles and mammals in Pennsylvania. Student skills in observation, identification of Wildlife will be developed. In addition, students will explore connections between the Wildlife Management lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ADVANCED WOOD TECHNOLOGY (IA011) - Grade 11, 12

This advanced Industrial technology course is more individualized and specific in scope. At the level, an attempt will be made to meet individual student needs. It encompasses enrichment, occupational awareness, and technical literacy for all students. Arts course is more individualized and specific in scope. At this level, an attempt will be made to meet individual student needs. It encompasses enrichment, occupational awareness, and technical literacy for all students and may provide employable skills for some students. In addition, students will explore connections between the Advanced Wood Technology lessons, Supervised Agricultural Experience, and FFA components that are important for the development of an informed agricultural education student.
PREREQUISITE: Cabinet Making
TEXTBOOK: Various References as Needed
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
CLASS LIMIT: 10

AG BUSINESS MANAGEMENT (AG016) – Grade 11, 12

This course will explore all aspects of owning and managing an agricultural business. Students will learn about profit, loss assets (short, medium, long) and liabilities (short, medium, long). Students will explore the options available to business owner for funding, will practice recordkeeping and will complete a business plan for a business in which they would like to be part of.
PREREQUISTE: None
LENGHTH OF COURSE: One Year
CREDIT TO BE ADWARDED: One Credit

AGRIBUSINESS SYSTEMS ONLINE- Grade 9, 10, 11, 12

This course will introduce students to the nature and scope of the agribusiness system and its global reach. Students will recognize and research agribusiness systems, agribusiness skills, global impact of agribusiness systems, agribusiness policies and regulations, personal utility and the law of supply and demand, the demand curve and microeconomics,

macroeconomics in agribusiness systems, scarcity and economics, understanding financial statements, analyzing financial performance, calculating financial ratios, creating budgets, marketing, policy and government intervention.
PREREQUISTE: Online approval required
LENGHTH OF COURSE: One Year
CREDIT TO BE ADWARDED: One Credit

POWER STRUCTURAL & TECHNICAL SYSTEMS - Grade 9, 10, 11, 12

This course will introduce students to the identification of tools and equipment used in power, structural, and technical systems. Students will recognize and research safety and associated practices in power, structural and mechanical systems, the importance of maintenance in power equipment, principles of operation in engines and motors, understanding regulations of materials and safe handling, sources of power and engines and equipment efficiency and powertrain theory of how power is produced by engines and motors, designing, constructing and maintaining structural systems, and impact and use of technologies in power and structural systems.
PREREQUISTE: Online approval required
LENGHTH OF COURSE: One Year
CREDIT TO BE ADWARDED: One Credit

ART

BASIC ART (612) – Grade 9, 10, 11, 12

This course explores 2 and 3-dimensional art using a variety of media and techniques. The basic elements of composition and the principles of design will be studies. Students will become acquainted with the works of famous artists. A desire to learn more about Art and experience many art forms are pluses for this course but strong drawing skills are not essential.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

DRAWING I (615) – Grades 10, 11, 12

Drawing I is a studio-oriented course that teaches students a variety of techniques and approaches through observation skills. Emphasis is also placed on producing artwork resulting from the influences of society, cultures, and styles. Through an atmosphere of exploration and visual problem solving of the elements of art and principles of design, the students will produce a collection of creative artwork.
PREREQUISITE: Basic Art
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CRAFTS (614) – Grade 10, 11, 12

The crafts class is a studio course which explores a wide range of traditional crafts. It is designed to show how man has used arts and crafts as a form of expression and necessity. Crafts will be presented in their historical content and the role of the craftsman in their specific culture. Students will have the opportunity to develop their artistic skills by creating individually unique and aesthetically pleasing usable items.
PREREQUISITE: Basic Art
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

PAINTING I (625) – Grades 11, 12

This course is a studio-oriented course which introduces students to the properties of color, various techniques and processes and the expression of ideas and emotions in oneself and others through the media of painting.
PREREQUISITE: Basic Art and Drawing I
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

DRAWING II (616) - Grades 11, 12

This course is a studio-oriented course which builds upon the fundamentals and expands on experiences and processes learned in the first-year course. This second-year course allows the advanced student room for exploration, creative choices, and development of personal techniques. Various artists, styles of art, art appreciation, and artwork displays are studied.
PREREQUISITE: Basic Art, Drawing I, and Instructor's Permission
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

PAINTING II (621) – Grades 11, 12

This course is a studio-oriented course which builds upon the fundamentals and expands on experiences and processes learned in the first-year course. This second-year course allows the advanced student room for exploration, creative choices, and development of personal techniques. Various artists, styles of art, art appreciation, and artwork displays are studied.
PREREQUISITES: Basic Art, Drawing I, Painting I, and Instructor's Permission
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CERAMICS I (624) - Grade 11, 12

This studio course is designed to acquaint the student with the media of clay. Students will develop their art skills by creating various ceramic forms using hand building techniques, surface decoration and glazes. The course will also explore 3 dimensional forms through the development of sculptures using a variety of media and techniques. This is a course for those who enjoy working three dimensionally and like a challenge.
PREREQUISITE: Basic Art (no drawing required)
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CERAMICS II (623) – Grade 12

This course continues the study of hand-built form and design in ceramics. It introduces and allows for the development of wheel thrown pottery techniques. Glaze mixing and firing techniques will be explored. Students will have the opportunity for independent study in the exciting media of clay.
PREREQUISITE: Ceramics I and Instructor's Permission
LENGTH OF COURSE: One Year
CREDIT AWARDED: One Credit

ART HISTORY (ART001) – Grade 10, 11, 12

Art Through the Ages is an Art History course that will explore art from the early pre-historic period through our current contemporary art. Artists and their styles will be discussed. The course will also allow students the opportunity to participate in hands-on art activities using techniques unique to a specific style or time period. In addition, technology will be an asset in leading students through virtual tours of museums like the Museum of Modern Art. Several art websites will also be investigated to further strengthen their art history knowledge. Possible field trips to local art museums may be a part of the Art Through the Ages class experience.
LENGTH OF COURSE: One Year
CREDIT AWARDED: One Credit

BUSINESS

PROGRAM OF STUDY-ACCOUNTING AND ADMINISTRATIVE ASSISTANT COMPLETERS AND CONCENTRATORS WILL TAKE THE NOCTI TEST IN GRADE 12 - PROGRAM STARTS IN 11TH GRADE

COMPUTER APPLICATIONS (560) (560I) – Grade 9, 10, 11, 12

During the first semester, students will strengthen and develop skills in Microsoft Word to format a variety of professional documents, including business letters, memos, reports, tables, and newsletters. Report formatting will be taught using MLA style as required by all classes.
During the second semester, students will receive an overview of Microsoft Excel, Access, and Power Point. Students interested in learning more about any of these advanced software programs are then encouraged to take the full-year course.
SOFTWARE: Microsoft Office
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE MICROCOMPUTER APPLICATIONS* (AD0001) – Grade 9, 10, 11, 12

This hands-on course introduces the student to the more popular microcomputer software packages available including Windows, word processing, spreadsheets, and presentations. This course provides students with a working knowledge of these software packages to accomplish the more common task. The Microsoft Office suite, MS Word, MS Excel and MS PowerPoint is used.
PREREQUISITES:
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE MICROCOMPUTER APPLICATIONS* (AD0001DE) Dual Enrollment – Grade 9, 10, 11, 12

College Level Penn Highlands Course

This hands-on course introduces the student to the more popular microcomputer software packages available including Windows, word processing, spreadsheets, and presentations. This course provides students with a working knowledge of these software packages to accomplish the more common task. The Microsoft Office suite, MS Word, MS Excel and MS PowerPoint is used.
PREREQUISITES:
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACCOUNTING I (520) – Grade 10, 11, 12

Accounting I will cover the accounting cycle for a service business that is organized as a sole proprietorship and a merchandising business that is organized as a partnership. This course emphasizes basic accounting skills and business procedures, while covering fundamental accounting concepts. This course helps build a foundation for students interested in pursuing a career in a business-related field or for students who would like to own a business one day.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Century 21 Accounting, South-Western Publishing Co.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

MICROSOFT WORD (563) – Grade 10, 11, 12

With this course, students will develop and apply their skills in Microsoft Word to format a variety of professional documents. Students will learn to arrange the most often used documents for personal, college, or business use (such as reports, newsletters, business letters, etc.) Upon successful completion of this course, students will have usable skills and be eligible to take the MOUS (Microsoft Office User Specialist) certification test for Microsoft Word.
SOFTWARE: Microsoft Office
PREREQUISITE: A grade of at least a "**C**" in Computer Applications and the recommendation of the Computer Applications teacher.
LENGTH OF COURSE: One Year

CREDIT TO BE AWARDED: One Credit

MICROSOFT EXCEL (583) – Grade 10, 11, 12

This course is an excellent course for both college-bound students (especially in the math and science fields) and for business students who will benefit from learning to use this spreadsheet program. Students will learn how to enter data, process information, and display results using Microsoft Excel software. Students will format text; use functions and formulas; create charts, graphs and tables and learn to do "What If" statements. Students will also learn to create organizational charts and diagrams and will apply skills to real-life examples and situations. Upon successful completion of this course, students will have usable skills and be eligible to take the MOUS (Microsoft Office User Specialist) certification test for Microsoft Excel.
SOFTWARE: Microsoft Excel
PREREQUISITE: A grade of at least a "C" in Computer Applications and the recommendation of the Computer Applications teacher
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE INTRO TO BUSINESS (AD0005) – Grade 10, 11, 12

This course examines the social, legal, ethical, economic, and political interactions of business and society. This is a foundation for the student who will specialize in some aspect of business and will also provide the opportunity for non-business majors to learn about the relationship and impact of business to a society in which they are citizens, consumers, and producers. The class includes such topics as economic systems, government and business, ethics and law, social responsibility, globalization and international business concepts, principles and practices.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE INTRO TO BUSINESS (AD0005DE) Dual Enrollment – Grade 10, 11, 12

This course examines the social, legal, ethical, economic, and political interactions of business and society. This is a foundation for the student who will specialize in some aspect of business and will also provide the opportunity for non-business majors to learn about the relationship and impact of business to a society in which they are citizens, consumers, and producers. The class includes such topics as economic systems, government and business, ethics and law, social responsibility, globalization and international business concepts, principles and practices.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

ACCOUNTING II (530) – Grade 11, 12

This is an introductory accounting course designed to introduce underlying concepts and Generally Accepted Accounting Principles (GAAP) used in determining revenue recognition, expense recognition, asset valuation, and reporting of liabilities. Double-entry accounting is introduced and applied to service companies. The entire accounting cycle for a service business operating as a sole proprietorship will be presented – from the point of original entry through the adjustment process, financial statement preparation, and post-closing trial balance preparation. Students will first be exposed to a manual accounting system, then QuickBooks Online will be utilized to expose students to computerized accounting systems. Also, this course helps prepare qualified students to take the Accounting NOCTI exam, which is a test for students studying career and technical programs.
PREREQUISITE: A grade of at least a "C" in Accounting I.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Wild, J. J., Shaw, K. W., & Chiappetta, B. (2017). *Fundamental Accounting Principles* (23rd ed.): New York, NY: McGraw-Hill/Irwin.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE ACCOUNTING PRINCIPLES (AD0006) Dual Enrollment– Grade 11, 12

ACC 150 College Level Penn Highlands Course

This is an introductory accounting course designed to introduce underlying concepts and Generally Accepted Accounting Principles (GAAP) used in determining revenue recognition, expense recognition, asset valuation, and reporting of liabilities. Double-entry accounting is introduced and applied to service companies. The entire accounting cycle for a service business operating as a sole proprietorship will be presented – from the point of original entry through the adjustment process, financial statement preparation, and post-closing trial balance preparation. Students will first be exposed to a manual accounting system, then QuickBooks Online will be utilized to expose students to computerized accounting systems. Also, this course helps prepare qualified students to take the Accounting NOCTI exam, which is a test for students studying career and technical programs.
PREREQUISITE: A grade of at least a "C" in Accounting I.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Wild, J. J., Shaw, K. W., & Chiappetta, B. (2017). *Fundamental Accounting Principles* (23rd ed.): New York, NY: McGraw-Hill/Irwin.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

ADVANCED COMPUTER APPLICATIONS (BI001) – Grade 10, 11, 12

This course is designed to give both the college-bound student and the business student a firm foundation of skills and knowledge using a variety of different computer programs. Emphasis will be on strengthening the use and comprehension of Excel, PowerPoint, Publisher, and Access. Students will also learn better Internet search techniques and will improve upon their research skills when using the Internet for school projects and/or work study projects. Students will learn to apply the skills learned in various programs using hands-on projects including presentations, creation of brochures, research reports, and use of a variety of different programs offered on the Internet. Students should leave this course with a better understanding of the various computer programs offered and should be able to create projects that will be beneficial to them at both the college and work levels.
PREREQUISITES: A grade of at least a "C" in Computer Applications—it is also recommended that students complete at least one of the following courses: Word, Excel or Access
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One

BUSINESS MATH (570)– Grade 11, 12

Business Mathematics is a course that covers basic mathematical concepts and applies them to common personal and business situations, such as banking, payroll, and taxes. Students will learn to use mathematics as a tool and develop skills through practical activities and applications. These practices will help students prepare for real world events and use mathematics in their personal and business lives.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Mathematics for Business
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CAREER EXPLORATION (585) (585I) – Grade 10, 11, 12

All students are required to pass this course prior to graduation. The purpose of this course is to prepare students for job acquisition and career readiness. This will be accomplished in the following ways:

- Career Exploration – throughout the course students will be exposed to a variety of career exploration tools including self-assessments, career research activities, mock interviews, and guest speakers. In addition, students will explore the world of entrepreneurship by participating in an Entrepreneurship Unit. Throughout this unit, students work in groups to develop an idea for a business, write a business plan including financial projections, and present their business idea to judges.
- Community Service – each student is required to complete 10 hours of community service while they are enrolled in the course. The service must be completed outside of school hours. The purpose of the community service requirement is to build awareness of the needs of the community as well as to develop transferable skills.
- Portfolio – each student is required to submit a personal portfolio at the end of the course. The portfolio is designed to be a collection of the student's work during their high school career. It should include items completed as class work, participation in clubs or extracurricular activities, part-time jobs, community service, etc.
- Employment Documents – each student will be required to prepare the following documents to be used in the employment application process: resume; application; cover letter; list of references; letters of reference; thank you letters; and request letters.

- Personal Finance Initiatives – during the course the students will also be exposed to various personal finance objectives.

TEXTBOOK: SmartFutures.org curriculum
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Degree students take online ACP in place of Career Exploration for graduation requirement.

PERSONAL FINANCE (584) – Grade 11, 12

Personal Finance is designed to give students a basic understanding of a variety of personal finance issues. Some of the areas covered include managing and balancing a checkbook, planning a monthly budget of income and expenses, planning for major purchases, and investing money for the long-term. This course will help students gain an understanding of financial events that will take place throughout their lifetime. It will also help students prepare for these financial events and make informed decisions.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Ryan, Joan S., Managing Your Personal Finances, Fifth Edition.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE PERSONAL CONSUMER FINANCE (AD0007) – Grade 11, 12

The course is designed to introduce the student to the basic principles of personal finance, with an emphasis on effective money management. Students will construct a financial plan, using the following concepts: personal financial statements, time value of money; tax planning, banking and interest rates, credit management, personal loans, major purchases and insurances, investment strategies, and retirement/estate planning.
PREREQUISITE: A grade of at least a "C" in Personal Finance or teacher approval required
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Keown, Authur J. Personal Finance – Turning Money into Wealth, 8th edition. Boston, MA: Pearson, 2020.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COLLEGE PERSONAL CONSUMER FINANCE (AD0007DE) Dual Enrollment – Grade 11, 12

BUS 130 College Level Penn Highlands Course

The course is designed to introduce the student to the basic principles of personal finance, with an emphasis on effective money management. Students will construct a financial plan, using the following concepts: personal financial statements, time value of money; tax planning, banking and interest rates, credit management, personal loans, major purchases and insurances, investment strategies, and retirement/estate planning.
PREREQUISITE: A grade of at least a "C" in Personal Finance or teacher approval required
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Keown, Authur J. Personal Finance – Turning Money into Wealth, 8th edition. Boston, MA: Pearson, 2020.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

MICROSOFT ACCESS/MARKETING MANAGEMENT (582) – Grade 11, 12

During the first semester, students will receive step-by-step instructions for using Microsoft Access, a database management software program. Through a variety of hands-on exercises and applications, students will be provided with an in-demand skill. Organizations from small businesses to the federal government use databases to manage and report on vast amounts of data. Learning to use a database management program will be especially useful to college bound students and for students entering the workforce.
During the second semester, students will further apply skills learned in Access as well as entrepreneurialism skills to prepare for potential career paths in market research study. Students will apply skills learned in Microsoft Word and Access to develop marketing research reports, marketing research surveys, marketing research questionnaires, and will then use this information to develop and query databases that will be useful to them in their personal lives and in their future careers. In addition, students will learn to use information gathered to determine effective ways to promote, price, and package goods. Students will be expected to use their market research to create charts, graphs, and presentations within the classroom and will be expected to analyze and interpret data collected.

Upon successful completion of this course, students will be prepared to take the MOUS (Microsoft Office User Specialist) certification test for Microsoft Access.
SOFTWARE: Microsoft Office Access
PREREQUISITE: A grade of at least a "B" in Computer Applications and the recommendation of the Computer Applications teacher
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

BUSINESS LAW/ECONOMICS (510) – Grade 12

Law is a force in everyone's life and this course will help students develop an awareness of one's legal rights and obligations as a productive member of society. Students are introduced to the study of law through a brief look at how law developed; the legal system in the United States; the function, organization, and work of the federal and state court systems; civil and criminal law, and the rights and responsibilities of young people, and basic contract law.
This course will provide students with an understanding of how economics plays a part in their everyday lives. A course in economics will help students develop an understanding of the principles that underlie the U.S. Free Enterprise System; will help students understand the operations of the U.S. economy; and will develop an appreciation of the benefits of living in a nation that enjoys a free enterprise system. This course should be of interest to all students because of their everyday contact with economics, but especially those students who plan to attend a college or business school.
This course will be offered as an online course only and will be self-paced by the student, with clear objectives and deadlines given by the participating instructor.
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: Economics Today and Tomorrow, Glencoe McGraw-Hill, Business Law Principles and Practices 2nd ed., Houghton Mifflin
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

OFFICE PROCEDURES & TECHNOLOGY (590) – Grades 11, 12

This course is designed to give the student competence and a firm foundation of skills and knowledge to enter the work force. Emphasis will be on strengthening computer skills, including Word, Excel and Publisher and on preparing students for skills needed in the workplace. Interpersonal skills and marketable skills required in the world of work today will also be developed. Students will be prepared to work in an office or to combine work and study as they further their education. This course will give a background in basic office functions, procedures, and technology that will be invaluable in meeting responsibilities on the job. Also, this course helps prepare qualified students to take the Administrative NOCTI exam, which is a test for students studying career and technical programs. NOTE: This course is offered simultaneously with Student Business Center.
PREREQUISITE: Computer Applications I, Word, and Excel or Access
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

STUDENT BUSINESS CENTER (591) – Grades 11, 12

Students will work one-on-one with assigned teachers to provide secretarial services such as typing, keying data, duplicating, collating, and stapling tests, worksheets, and other papers needed by the participating teacher. Hands-on training in various school offices may also be included, with an emphasis on work and employability skills including mail distribution, proper phone techniques, handling outside guests and phone lines, form preparation, etc. Daily work logs will be filled out by the student and turned in to the supervising teacher. Students will learn to prioritize and manage potentially large volumes of work, how to get along with various kinds of supervisors, and how to meet deadlines. NOTE: This course is offered simultaneously with Office Procedures unless approval from supervising teacher is given.
PREREQUISITE: Students must either be a completer in a business program (administrative assistant or accounting) or must be enrolled in at least two business courses for that school year. Approval must be received from the Office Procedures teacher after student completes job application/interview.
NOTE: Enrollment is limited for each class period. Priority will be given to those students who are seniors and who are also completers in the business program. Underclassmen or non-completers will only be considered for this course if there are zero completers available or with prior approval from Office Procedures teacher.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

COMPUTER SCIENCES DEPARTMENT

**Courses in Computer Science are highly encouraged for the development of future workforce skills. MUASD recognizes this need in our course options and has created this new department to meet the needs of this growing career field. In an effort to improve access to computer science learning opportunities, the Pennsylvania Department of Education, under Act 86 of 2016 (24 P.S. § 16-1605), and MUASD now permit a high school computer science course to count as ONE math or science credit toward graduation upon successful completion of the course.*

INTRO TO COMPUTER SCIENCE (COM001) - GRADES 9, 10, 11, 12

Students in this introductory class will learn the foundational concepts of computer science including but not limited to the history of computers, how computers work, and how technology can impact the world. Students will learn the fundamentals of computer programming (coding), web design, data modeling, and robotics. Students will become skilled coders, using hands-on programming activities, graphics, and animation and will experience designing their own games and/or apps, manipulating data, and exploring robotics. Course content will be designed to be relevant to students' lives.
LENGTH OF COURSE: One Year
TEXTBOOK AND/OR SUPPLEMENTARY MATERIALS: www.code.org
CREDIT TO BE AWARDED: One Credit
**This course may NOT count as one credit toward the math or science course requirement for graduation since it is introductory.*
**This course is a prerequisite for future course offerings such as Computer Science & Programming, Data Science, Graphic & Web Design, & Robotics.*

HEALTH/PHYSICAL EDUCATION DEPARTMENT

HEALTH (904) – Grade 9

This course will develop a philosophy on emotional health, family and social health, human sexuality and sexually transmitted diseases, alcohol, tobacco and drugs, mental illness, suicide, first aid, nutrition, fitness and anatomy.
TEXTBOOK: Glencoe Health.
LENGTH OF COURSE: One year-Monday, Wednesday, Friday alternating with Study Hall Tuesday, Thursday
CREDIT TO BE AWARDED: .5 Credit

COLLEGE HEALTH & Wellness* (AD0008DE) Dual Enrollment – Grade 9, 10, 11, 12

This is a health science course that explores variables related to achieving a healthier life in an attempt to obtain and maintain vitality. This course is designed to introduce students to the foundations of healthy lifestyles, wellness promotion activities, and associated behaviors. Health is more than weight and lifestyle behaviors contribute to wellness in all dimensions of health throughout the life cycle. The goal is for students to use this knowledge to inspect current personal behaviors and to learn to learn to implement practical changes in order to make informed, sovereign, and self-empowering health choices that will be an investment into their own well-being,
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit
*Student must pay tuition fees to Penn Highlands

RECREATION/FITNESS (950)-Boys (950G)-Girls – Grade 9, 10, 11, 12

RECREATION: This class will promote the physical, social, and emotional development of each student through planned activities. A wide variety of offerings include: basketball, flicker football, softball, bowling, table tennis, racquet sports, shuffle board, golf, jogging, volleyball, gator ball, angle ball, and archery.

FITNESS: This class will promote the physical, social, and emotional development of each student through planned activities. The following will be presented: fitness testing, weight training, aerobics, fitness walking, individual fitness programs and diet and nutrition.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

MUSIC DEPARTMENT

SENIOR HIGH CHORUS (830) (831) w/band– Grade 9, 10, 11, 12

Chorus is an elective course offered to all students. During class time students will learn to sing to the best of their ability. An emphasis is placed on breath control, intonation, posture, pronunciation, and musicality. Students will be taught the solfege techniques (do-re-me intervals) created by Kodaly which will aid their ability to sight-read all music. A grade is given to students based on all class work (written/unwritten), attitude, participation and vocal improvement. Students can also audition for solos, duets or for small ensembles.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit or .50 credit with band

GENERAL MUSIC (832) – Grade 9, 10, 11, 12

Student must be pre-approved by the instructor and have completed one year of choir to register for this class. This small class will focus on many areas of music, including but not limited to, music theory, music history, aural skills, vocal skills, and guitar. This class is for students who want to become more musically well-rounded and/or pursue music in the future.
PREREQUISITES: One year of chorus experience and director's approval.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit or 0.50 credit with Jazz Band

JAZZ BAND (833) – Grade 9, 10, 11, 12

Select group of students: trumpets, saxophone, trombone, drums, bass guitar, guitar and piano. Students will audition for placement the spring before class begins. This is a graded course. Students will be evaluated on their class participation and attendance during school day and after-school public performances. Students enrolled in the senior high band program are given preference for seats in this course. The director reserves the right to limit participation in any or all instrument sections to those that are enrolled in Senior High Band (course numbers MU002 or MU003).
PREREQUISITE: One year of band experience, director's approval and must have musical experience.
In the event of a missed concert, students must complete a make-up assignment of playing selections into a recording device for grading. If they fail to do so, they will receive a ZERO grade for that assignment.
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

CONCERT BAND (MU002) (MU002A) w/chorus – Grade 9, 10, 11, 12

Students in this course will continue to develop the skills necessary for individual and large ensemble performances. The course is devoted to learning symphonic band music. Performances include a fall, a winter and a spring concert. There are also several band festivals for students to audition for including District Band (Jan. /Feb.) and County Band Festival (Feb or March).

Band members are required to provide their own instruments, book and accessories; however, the Mount Union Area School District does provide the larger or more expensive instruments in order to enhance and expand the Band's instrumentation. Students are encouraged to take part in the program's extra offerings of Football Pep Band, Competition Marching Band, Indoor Percussion, Indoor Color guard, and Indoor Majorettes. Students participating in those activities will receive the credit of **(2) lessons**.
PREREQUISITE: Jr. High Band or Director's Permission. Must attend ALL rehearsals. Chair Audition. **Six Private Lessons per marking period with Director. (Instrumental Instruction)**
Students will be given a grade based on the completion of assignments (classwork and homework), participation, preparedness, and improvement as a musician. ***In the event of a missed concert, students must complete a make-up assignment of playing selections into a recording device for grading. If they fail to do so, they will receive a ZERO grade for that assignment.***

LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit or .50 with chorus

CONCERT & MARCHING BAND (MU003) (MU003A) w/chorus – Grade 9, 10, 11, 12

Students in this course will continue to develop the skills necessary for individual and large ensemble performances. The course is devoted to learning symphonic band music. Performances include a fall, a winter and a spring concert. There are also several band festivals for students to audition for including District Band (Jan./Feb.) and County Band Festival (Feb or March).

Band members are required to provide their own instruments, book and accessories; however, the Mount Union Area School District does provide the larger or more expensive instruments in order to enhance and expand the Band's instrumentation. Students are encouraged to take part in the program's extra offerings of Football Pep Band, Competition Marching Band, Indoor Percussion, Indoor Color guard, and Indoor Majorettes. Students participating in those activities will receive the credit of **(2) lessons**.
PREREQUISITE: Jr. High Band or Director's Permission. Must attend ALL rehearsals. Chair Audition. **Six Private Lessons per marking period with Director. (Instrumental Instruction)**
Students will be given a grade based on the completion of assignments (classwork and homework), participation, preparedness, and improvement as a musician. ***In the event of a missed concert, students must complete a make-up assignment of playing selections into a recording device for grading. If they fail to do so, they will receive a ZERO grade for that assignment.***
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit or .50 credit with chorus

PLEASE ASK THE INSTRUCTOR (Ms. Barnoff) if you are unsure about your eligibility.

MUSIC THEORY (MU001) – Grades 10, 11, 12

This course provides students with an understanding of the fundamentals of music and includes the following topics: composition, arranging, analysis, aural development, and sight reading.
PREREQUISITE: General Music
LENGTH OF COURSE: One Year
CREDIT TO BE AWARDED: One Credit

ACADEMY CUSTOMIZED LEARNING

The ACL program is available to students as a means for credit recovery, credit acceleration, courses not offered in our regular classrooms, college courses, and to resolve scheduling conflicts. **Courses are subject to change without notice and dependent upon PA certified teacher availability.**

Department	Course
Agriculture	Agribusiness Systems
Agriculture	Animal Systems
Agriculture	Introduction to Agriscience
Agriculture	Introduction to Veterinary Science
Agriculture	Power Structural and Technical Systems
Agriculture	Principles of Agriculture Food & Natural Resources A
Agriculture	Principles of Agriculture Food & Natural Resources B
Agriculture	Veterinary Science
Agriculture	Veterinary Science: The Care of Animals
AP	AP Art History A
AP	AP Art History B

Department	Course
Health/PE	Contemporary Health A
Health/PE	Contemporary Health B
Health/PE	Exercise Science
Health/PE	Health Careers
Health/PE	Health Education
Health/PE	Health Principles A
Health/PE	Health Principles B
Health/PE	Health Principles MS A
Health/PE	Health Principles MS B
Health/PE	Health Safety and Ethics in Health Environment
Health/PE	Healthy Lifestyles A

Department	Course
AP	AP Biology A
AP	AP Calculus AB A
AP	AP Calculus AB B
AP	AP Calculus BC A
AP	AP Calculus BC B
AP	AP Chemistry A
AP	AP Chemistry B
AP	AP Computer Science A
AP	AP Computer Science B
AP	AP Computer Science Principles A
AP	AP Computer Science Principles B
AP	AP English Language and Composition A
AP	AP English Language and Composition B
AP	AP English Literature and Composition A
AP	AP English Literature and Composition B
AP	AP Environmental Science A
AP	AP Environmental Science B
AP	AP European History A
AP	AP European History B
AP	AP French Language and Culture A
AP	AP French Language and Culture B
AP	AP German A
AP	AP Human Geography B
AP	AP Macroeconomics A
AP	AP Macroeconomics B
AP	AP Microeconomics A
AP	AP Microeconomics B
AP	AP Physics I A
AP	AP Physics I B
AP	AP Psychology A
AP	AP Psychology B
AP	AP Spanish Language & Cultures A
AP	AP Spanish Language & Cultures B
AP	AP Spanish Language A
AP	AP Spanish Language B
AP	AP Statistics A
AP	AP Statistics B
AP	AP US Government and Politics
AP	AP US History A
AP	AP US History B
AP	AP World History A
AP	AP World History B

Department	Course
Health/PE	Healthy Lifestyles B
Health/PE	Healthy Living A
Health/PE	Healthy Living B
Health/PE	Hope I
Health/PE	Hope II
Health/PE	Personal Fitness Concepts
Health/PE	Personal Health and Fitness
Health/PE	Personal Wellnes & CPR
Health/PE	Personal Wellness Foundations A
Health/PE	Personal Wellness Foundations B
Health/PE	Physical Education HS A
Health/PE	Physical Education HS B
Healthcare	Anatomy & Physiology A
Healthcare	Anatomy & Physiology B
Healthcare	Anatomy & Physiology Honors A
Healthcare	Anatomy & Physiology Honors B
Healthcare	Anatomy & Physiology Human Disease A
Healthcare	Anatomy & Physiology Human Disease B
Healthcare	Anatomy A
Healthcare	Anatomy B
Healthcare	Careers in Allied Health
Healthcare	Certified Nurse Aide A
Healthcare	Certified Nurse Aide B
Healthcare	Child Development & Parenting A
Healthcare	Child Development & Parenting B
Healthcare	Child Development A
Healthcare	Child Development B
Healthcare	Early Childhood Development and Services
Healthcare	Early Childhood Education A
Healthcare	Early Childhood Education B
Healthcare	First Aid and Safety
Healthcare	Health Science Concepts A
Healthcare	Health Science Concepts B
Healthcare	Health Science I A
Healthcare	Health Science I B
Healthcare	Health Science I Patient Care & Medical Services A
Healthcare	Health Science I Patient Care & Medical Services B
Healthcare	Health Science I The Whole Individual A
Healthcare	Health Science I The Whole Individual B
Healthcare	Health Science II A
Healthcare	Health Science II B
Healthcare	Health Science II Patient Care and Medical Services A

Department	Course
Art	Art History & Appreciation
Art	Art History A
Art	Art History B
Art	Art in World Cultures
Art	Art Studies A
Art	Art Studies B
Art	Basic Art
Art	Careers in Arts
Art	Digital and Interactive Media A
Art	Digital and Interactive Media B
Art	Digital Art & Design MS I A
Art	Digital Art & Design MS I B
Art	Digital Media
Art	Digital Photography A
Art	Digital Photography B
Art	Digital Photography Discovering Your Creative Potential II
Art	Digital Photography I Creating Images with Impact
Art	Digital Photography II
Art	Drawing Advanced
Art	Fundamentals of Digital Media
Art	Introduction to Art A
Art	Introduction to Art B
Art	Introduction to Careers in Arts AV Technology and Communication
Art	Introduction to Visual Arts
Art	Orientation to 2D Art MS
Art	Painting Beginning
Art	Principles of Arts Audio/Video Technology and Communications A
Art	Principles of Arts Audio/Video Technology and Communications B
Art	Visual and Performing Arts A
Art	Visual and Performing Arts B
Business	Accounting I A
Business	Accounting I B
Business	Administrative Duties and Office Management
Business	Advertising and Sales
Business	Banking Services Careers
Business	Business Computer Information Systems A
Business	Business Computer Information Systems B
Business	Business English A
Business	Business English B
Business	Business Information Management A

Department	Course
Healthcare	Health Science II Patient Care and Medical Services B
Healthcare	Introduction to Careers in Health Sciences A
Healthcare	Introduction to Human Growth & Development
Healthcare	Medical Terminology A
Healthcare	Medical Terminology B
Healthcare	Nursing Assistant
Healthcare	Nursing I A
Healthcare	Nursing I B
Healthcare	Nursing Intro I
Healthcare	Nursing Intro II
Healthcare	Nursing Unlimited Potential & Possibilities
Healthcare	Nutrition & Wellness A
Healthcare	Nutrition A
Healthcare	Pharmacy Technician
Healthcare	Physicians Pharmacists Dentists Vets and other Doctors A
Healthcare	Physicians Pharmacists Dentists Vets and other Doctors B
Healthcare	Physiology
Healthcare	Principles of Health Science A
Healthcare	Principles of Health Science B
Healthcare	Public Health Discovering the Big Picture in Health Care
History	Anthropology A
History	Anthropology B
History	Anthropology More Human Mysteries Uncovered
History	Anthropology Uncovering Human Mysteries
History	Civics & Government A
History	Civics & Government B
History	Civics A
History	Civics B
History	Civil War A
History	Civil War B
History	Geography US A
History	Geography US B
History	Government American A
History	Government American B
History	Government American Honors A
History	Government American Honors B
History	History European A
History	History European B
History	History Modern American A
History	History Modern American B

Department	Course
Business	Business Information Management B
Business	Business Law B
Business	Career Exploration I A
Business	Career Exploration I B
Business	Career Explorations II
Business	Career Explorations III
Business	Career Planning and Development
Business	Careers in Criminal Justice A
Business	Careers in Criminal Justice B
Business	Careers in Dentistry
Business	Careers in Health Science
Business	Careers in Logistics Planning and Management Services
Business	Careers in Marketing Research
Business	Computer Applications Office 2019 A
Business	Computer Applications Office 2019 B
Business	Computer Basics
Business	Economics A
Business	Economics B
Business	Economics Financial Literacy A
Business	Economics Financial Literacy B
Business	Economics Sociology A
Business	Economics Sociology B
Business	Entrepreneurship A
Business	Entrepreneurship B
Business	Essentials of Business A
Business	Essentials of Business B
Business	Excel
Business	Financial Math A
Business	Financial Math B
Business	International Business
Business	International Business Global Commerce in the 21st Century
Business	Introduction to Business A
Business	Introduction to Business B
Business	Introduction to Careers in Finance
Business	Introduction to Entrepreneurship
Business	Introduction to Finance
Business	Introduction to Marketing A
Business	Introduction to Marketing B
Business	Keyboarding and Applications
Business	Manufacturing Production Design and Innovation
Business	Marketing Advertising and Sales

Department	Course
History	History Modern World A
History	History Modern World B
History	History of the Holocaust
History	History US I A
History	History US I B
History	History US I Honors A
History	History US I Honors B
History	History US II A
History	History US II B
History	History US II Honors A
History	History US II Honors B
History	History US III A
History	History US III B
History	History World Western A
History	Human Geography
History	Human Geography Our Global Identity
History	Introduction to Anthropology
History	Introduction to Archaeology
History	Personal Psychology: Living in a Complex World II
History	Personal Psychology: Road to Self-Discovery I
History	Psychology A
History	Psychology B
History	Sociology A
History	Sociology B
History	Sociology Human Behavior A
History	Sociology Human Behavior B
History	Sociology I The Study of Human Relationships
History	Sociology II Your Social Life
History	Western Civilization I A
History	Western Civilization I B
History	Western Civilization II A
History	Western Civilization II B
History	Western World History A
History	Western World History B
History	World Civilizations II A
History	World Civilizations II B
History	World Cultures A
History	World Cultures B
History	World Geography A
History	World Geography B
History	World History & Geography I A

Department	Course
Business	Marketing and Sales for Tourism and Hospitality
Business	Marketing I A
Business	Marketing I B
Business	Marketing II A
Business	Marketing II B
Business	Microsoft Excel
Business	Microsoft Office Specialist A
Business	Microsoft Office Specialist B
Business	Personal and Family Finance A
Business	Personal Finance
Business	Personal Financial Literacy
Business	Principles of Business Marketing and Finance A
Business	Principles of Business Marketing and Finance B
Business	Principles of Information Technology A
Business	Principles of Information Technology B
Business	Restaurant Management
Business	Small Business Entrepreneurship A
Business	Small Business Entrepreneurship B
Business	Sports and Entertainment Marketing A
Business	Sports and Entertainment Marketing B
Electives	Academic Success
Electives	Archaeology
Electives	Archaeology Detectives of the Past
Electives	Careers in Personal Training Preparation
Electives	College & Career Readiness
Electives	Conflict Management A
Electives	Conflict Management B
Electives	Contemporary World A
Electives	Contemporary World B
Electives	Contemporary World Issues A
Electives	Contemporary World Issues B
Electives	Corrections Policies and Procedures
Electives	Criminology
Electives	Criminology Inside the Criminal Mind A
Electives	Critical Thinking and Study Skills
Electives	Driver's Ed Pennsylvania
Electives	Drugs and Alcohol A
Electives	Essential Career Skills
Electives	Family and Community Services
Electives	Family and Consumer Science
Electives	Family Life Education A
Electives	Family Life Education B

Department	Course
History	World History & Geography I B
History	World History & Geography II A
History	World History & Geography II B
History	World History A
History	World History B
History	World History I A
History	World History I B
History	World History I Honors A
History	World History I Honors B
History	World History II B
History	World History II Honors A
History	World History II Honors B
History	World History Survey A
History	World History Survey B
History	World Studies A
History	World Studies B
Math	Algebra Advanced A
Math	Algebra Advanced B
Math	Algebra Functions and Data Analysis A
Math	Algebra Functions and Data Analysis B
Math	Algebra I A
Math	Algebra I B
Math	Algebra I Honors A
Math	Algebra I Honors B
Math	Algebra II A
Math	Algebra II B
Math	Algebra II Honors A
Math	Algebra II Honors B
Math	Algebra II Trigonometry A
Math	Algebra II Trigonometry B
Math	Algebra III A
Math	Algebra III Trigonometry A
Math	Algebra III Trigonometry B
Math	Algebra Introductory A
Math	Algebra Introductory B
Math	Applications of Math A
Math	Calculus A
Math	Calculus Advanced A
Math	Calculus Advanced B
Math	Calculus B
Math	Calculus Honors A
Math	Calculus Honors B

Department	Course
Electives	Family Living and Healthy Relationships A
Electives	Family Living and Healthy Relationships B
Electives	Film and Television
Electives	Foundations of Green Energy
Electives	Global Studies A
Electives	Global Studies B
Electives	Global Studies Honors A
Electives	Global Studies Honors B
Electives	Introduction to Careers in Education and Training
Electives	Introduction to Careers in Govt and Public Admin
Electives	Introduction to Communications and Speech A
Electives	Introduction to Criminology
Electives	Introduction to Human Growth and Development A
Electives	Introduction to Human Growth and Development B
Electives	Introduction to Human Services
Electives	Introduction to Military Careers
Electives	Introduction to Philosophy
Electives	Introduction to Social Media I A
Electives	Introduction to Social Media I B
Electives	Introduction to Social Media: Our Connected World
Electives	Introduction to World Religions
Electives	Law
Electives	Law and Order
Electives	Law Enforcement Field Services
Electives	Leadership Skills Development A
Electives	Leadership Skills Development B
Electives	Legal Services
Electives	Life Skills A
Electives	Life Skills B
Electives	Music Appreciation
Electives	Music Appreciation The Enjoyment of Listening
Electives	Music Studies A
Electives	Music Studies B
Electives	Mythology and Folklore
Electives	Mythology and Folklore: Legendary Tales
Electives	Peer Counseling
Electives	Personal Care Services
Electives	Philosophy
Electives	Philosophy The Big Picture A
Electives	Photojournalism
Electives	Planning Meetings and Special Events
Electives	Principles of Education and Training A

Department	Course
Math	Consumer Math A
Math	Functions Statistics & Trigonometry B
Math	Fundamental Math A
Math	Fundamental Math B
Math	Geometry A
Math	Geometry B
Math	Integrated Math I A
Math	Integrated Math I B
Math	Integrated Math II A
Math	Integrated Math II B
Math	Integrated Math III A
Math	Integrated Math III B
Math	Math College Prep A
Math	Math College Prep B
Math	Math Fundamentals A
Math	Math Fundamentals B
Math	Math I A
Math	Math I B
Math	Math II A
Math	Math II B
Math	Math Topics A
Math	Math Topics B
Math	Mathematical Models with Applications A
Math	Mathematical Models with Applications B
Math	Mathematics I A
Math	Mathematics I B
Math	Mathematics II A
Math	Mathematics II B
Math	Mathematics III A
Math	Mathematics III B
Math	Pre-Algebra A
Math	Pre-Algebra B
Math	Pre-Calculus A
Math	Pre-Calculus B
Math	Pre-Calculus Honors A
Math	Pre-Calculus Honors B
Math	Pre-Calculus Trigonometry A
Math	Probability and Statistics B
Math	Problem Solving A
Math	Problem Solving B
Math	Statistics A
Math	Statistics B

Department	Course
Electives	Principles of Education and Training B
Electives	Principles of Government and Public Administration A
Electives	Principles of Government and Public Administration B
Electives	Principles of Human Services A
Electives	Principles of Human Services B
Electives	Principles of Public Service To Serve and Protect
Electives	Professional Communications
Electives	Professional Photography A
Electives	Professional Photography B
Electives	Real World Parenting
Electives	Social Issues
Electives	Social Media I
Electives	Social Problems A
Electives	Social Problems B
Electives	Social Problems I World in Crisis
Electives	Social Problems II Crisis Conflicts and Challenges
Electives	Strategies for Academic Success
Electives	Teaching and Training Careers
Electives	Technology and Business
Electives	Theater
Electives	Theater Cinema and Film Production A
Electives	Theater Cinema and Film Production B
Electives	Therapeutics The Art of Restoring and Maintaining Wellness
Electives	Transportation and Tours for the Traveler
Electives	Women's Studies I
Electives	World of STEAM
Electives	World Religions A
Electives	World Religions B
Electives	World Religions Exploring Diversity
Engineering	Engineering & Product Development
Engineering	Engineering Design
Engineering	Introduction to Manufacturing Product Design & Innovation
Engineering	Principles of Engineering and Technology A
Engineering	Principles of Engineering and Technology B
English	American Literature A
English	American Literature B
English	American Literature Contemporary
English	American Literature Honors A
English	American Literature Honors B
English	Classic Novels and Author Studies A
English	Classic Novels and Author Studies B

Department	Course
Math	Topics in Math A
Math	Topics in Math B
Math	Trigonometry
Science	Agriscience I: Introduction to Agriscience
Science	Agriscience II A
Science	Applied Science A
Science	Applied Science B
Science	Astronomy A
Science	Astronomy B
Science	Astronomy Exploring the Universe A
Science	Astronomy Exploring the Universe B
Science	Biology Advanced A
Science	Biology Advanced B
Science	Biology Honors A
Science	Biology Honors B
Science	Biology I A
Science	Biology I B
Science	Biology II A
Technology	3D Modeling B
Technology	Animation A
Technology	Animation B
Technology	Artificial Intelligence
Technology	Audio Video Production I A
Technology	Audio Video Production I B
Technology	Audio Video Production II A
Technology	Audio Video Production II B
Technology	Audio Video Production III A
Technology	Audio Video Production III B
Technology	Computer Programming 1 A
Technology	Computer Programming 1 B
Technology	Computer Programming C++ A
Technology	Computer Science Advanced A
Technology	Computer Science Advanced B
Technology	Computer Science Principles A
Technology	Computer Science Principles B
Technology	Computing for College and Career A
Technology	Computing for College and Career B
Technology	Digital Design A
Technology	Digital Design B
Technology	Digital Information Technology A
Technology	Digital Information Technology B

Department	Course
English	Contemporary Novels
English	Creative Writing A
English	Creative Writing B
English	ELL Success I
English	ELL Success II
English	English I A
English	English I B
English	English II A
English	English II B
English	English III A
English	English III B
English	English IV A
English	English IV B
English	English Literature and Composition A
English	English Literature and Composition B
English	Expository Reading and Writing A
English	Expository Reading and Writing B
English	Gothic Literature A
English	Gothic Literature B
English	Gothic Literature: Monster Stories
English	Grammar and Composition A
English	Grammar and Composition B
English	Introduction to Communications and Speech B
English	Introduction to Literature A
English	Introduction to Literature B
English	Introduction to Literature Honors A
English	Introduction to Literature Honors B
English	Journalism A
English	Journalism B
English	Literacy and Comprehension I A
English	Literacy and Comprehension I B
English	Literacy and Comprehension II A
English	Literacy and Comprehension II B
English	Literature A
English	Literature B
English	Literature British A
English	Literature British B
English	Literature British Honors A
English	Literature British Honors B
English	Literature Honors A
English	Literature Honors B

Department	Course
Technology	Electronic Communication Skills
Technology	Foundations of Programming A
Technology	Foundations of Programming B
Technology	Fundamentals of Computer Systems
Technology	Fundamentals of Programming and Software Development
Technology	Game Design A
Technology	Game Design B
Technology	Game Design II A
Technology	Game Design II B
Technology	Game Development
Technology	Graphic Design and Illustration A
Technology	Graphic Design and Illustration B
Technology	Introduction to Android Mobile App Development
Technology	Introduction to Coding
Technology	Introduction to Cybersecurity A
Technology	Introduction to Cybersecurity B
Technology	Introduction to Information Technology I A
Technology	Introduction to Information Technology I B
Technology	Introduction to Information Technology II Support and Services
Technology	Introduction to IOS Mobile App Development
Technology	Introduction to Network Systems
Technology	Introduction to STEM
Technology	Learning in a Digital World
Technology	Media and Communication
Technology	Network System Design
Technology	Networking Fundamentals
Technology	Programming Fundamentals MS A
Technology	Programming Fundamentals HS A
Technology	Programming Fundamentals HS B
Technology	Programming Fundamentals MS B
Technology	Programming Python I A
Technology	Programming Python I B
Technology	Programming Python II A
Technology	Programming Python II B
Technology	Renewable Technology A
Technology	Renewable Technology B
Technology	Robotics I A
Technology	Robotics I B
Technology	Software Development Tools
Technology	STEM and Problem Solving
Technology	Web Design A

Department	Course
English	Lord of the Rings: The Films & Literacy Influences
English	Multicultural Literature A
English	Multicultural Literature B
English	Public Speaking A
English	Public Speaking B
English	Shakespeare A
English	Shakespeare B
English	Structure of Writing
English	World Literature A
English	World Literature B
English	World Literature Honors A
English	World Literature Honors B
English	Writing Skills and Strategies A
English	Writing Skills and Strategies B

Department	Course
Technology	Web Design B
Technology	Web Technologies A
Technology	Web Technologies B
Trades	Careers in Construction
Trades	Cosmetology Business of Skin & Nail Care
Trades	Cosmetology Cutting Edge Styles
Trades	Cosmetology I
Trades	Cosmetology II
Trades	Cosmetology III A
Trades	Cosmetology III B
Trades	Culinary Arts I A
Trades	Culinary Arts I B
Trades	Culinary Arts II
Trades	Drafting and Design A
Trades	Drafting and Design B
Trades	Fashion and Interior Design A
Trades	Hotel & Restaurant Management B
Trades	Introduction to Careers in Architecture and Construction
Trades	Introduction to Culinary Arts
Trades	Introduction to Fashion Design
Trades	Introduction to Law Public Safety Corrections and Security
Trades	Principles of Transportation Distribution and Logistics A
Trades	Principles of Transportation Distribution and Logistics B

Online Course Request Requirements:

- Course must be required for graduation and should be career related
- Recommended by guidance counselor, teacher, or administrator
- Obtain necessary signatures and return signed Course Contract to complete enrollment request process
- Maintain passing grades in both online and classroom courses
- Follow all rules in student handbook and ACL classroom
- Complete all assignments and agree to proctored tests in the ACL lab
- Students are responsible for time extension cost if extended time is needed to finish a course
- Students must complete and pass each course to be eligible for additional online course opportunities.

Additional Online Courses

Scan this QR code or use this to view the senior high online course list.

Online Course Request Procedures

Students must complete an Online Course Request Form.

Scan this QR code to view the Online Course Request form.

CO-ENROLLMENT

Co-enrollment courses are credit-bearing courses that a high school student takes to earn college credit and simultaneously meet high school graduation requirements. The college or university offering the courses must be accredited. Students may take courses at Juniata College, Mount Aloysius-In MU classrooms, Penn Highlands-in MU classrooms and online. Cost of course, books, and transportation is paid by the student.

PREREQUISITE: Excellent academic standing, teacher recommendation and administrator approval. Each college has specific entrance requirements: GPA, SAT Scores & specific entrance testing scores.

Juniata College - Listing of courses for the fall semester will be available on-line in March.

Click on "Academics" then "Courses", and "Time of Day"

Scan this QR code or use this link for the student registration form.

Mount Aloysius – Accelerated Chemistry w/ lab, College Chemistry w/ lab

Scan this QR code or use this link for the Mt. Aloysius Application, Registration, and Tuition Payment

Penn Highlands Community College - See ACE-Full Year courses in the table below

Scan this QR code or use this link for the Penn Highlands Non-Matriculated Application

Fall semester course listing of courses for the fall semester will be available on-line in March.

Associate Degree in High School (AHS) and Pathways programs

*** Courses subject to change*

Associate Degree (AHS) students complete all the above courses

- Upon completion earn 63 college credit
- Associate of Arts Degree in Liberal Arts and Sciences.

Grade 9	**Credit**	**Planned Completion**
CIT 100- Microcomputer Applications	3	ACE - Full Year
HIS 100 – U.S. History I	3	ACE - Full Year
LIF111 – Health & Wellness	3	ACE - Full Year
ACP100 – Academic and Career Planning	1	Online - Fall
Grade 10	**Credits**	**Planned Completion**
MAT 145 – College Algebra	3	ACE - Full Year
BUS 130 – College Personal Finance	3	ACE – Full Year
MUS100 – Introduction to Music	3	Online - Fall
ART 101 – Introduction to Art History	3	Online - Spring
AST100 – Introduction to Astronomy	3	Online - Spring
Grade 11	**Credit**	**Planned Completion**
ENG 110 – English Composition I	3	ACE - Full Year
PSY 100 – General Psychology	3	ACE - Full Year
CHM 120 – General Chemistry I	4	Transfer Mt. Aloysius
ANT100 – Introduction to Cultural Anthropology	3	Online - Fall
HUM 100 – Introduction to Humanities	3	Online - Fall
COM101 – Public Speaking	3	Online - Spring

Grade 12	Credit	Planned Completion
CHM 122 – General Chemistry II	4	Transfer Mt. Aloysius
ENG 200 – English Composition II	3	ACE - Full Year
BUS 100 – Introduction to Business	3	ACE – Full Year
Open Elective	3	Online - Fall
Open Elective	3	Online – Spring
Open Elective	3	Online – Spring

Academy Pathways students take only those courses indicated as ACE – Full Year

- Upon high school graduation students spend 1-year at Penn Highlands
- Pathways students choose any Associate Degree program to complete within that year.
- Penn Highlands bills as a blocked schedule rate.
- Students can access financial aid.

CAREER AND TECHNOLOGY EDUCATION

Career and Technology programs offered at the Mount Union Area School District

ACCOUNTING TECHNOLOGY – Grades 11, 12

Select the required business courses during the 11th and 12th grade year. Discuss options with Mrs. Cooper.

AGRICULTURE PRODUCTION OPERATIONS – GRADE 9, 10, 11 12

Select the required ag courses during the 9th, 10th, 11th, and 12th grade year. Discuss options with Ms. Fisher

ADMINISTRATIVE ASSISTANT – Grades 11, 12

Select the required business courses during the 11th and 12th grade year. Discuss options with Mrs. Cooper.

The Huntingdon County Career and Technology Center offers a variety of courses to qualifying students. These courses are offered to students in grades 10 through 12. This is a one-half day program - A.M. Transportation is provided by the Mount Union Area School District.

Students applying for admission to attend the CTC - *Please complete the "Application for Admission to HCCTC".* Programs at the Huntingdon County Career & Technology Center provide students the opportunity to acquire some type of; industry certification, certificate, industry credential or license. All programs have articulation agreements with colleges. Students completing their program at a proficient level and pass end of program testing can earn college credits.

Auto Mechanics AM (972)
The Automotive Mechanics program prepares individuals to apply technical knowledge and skills to service, repair and maintain all types of automobiles and light trucks. This program provides instruction in all eights area of Automotive Service Excellence (ASE) categories: heating & air conditioning, steering & suspension, brakes, electrical/electrical systems, engine repair, automatic trans/transaxle, manual drive trains & axles, and engine performance.

Carpentry AM (CTC003)
Construction trades is an instructional program that exposes students to a variety of construction skills that will prepare them for entry level positions in many facets of the construction industry. Instructional areas include: the use of various hand and power tools, rough & finished carpentry, painting & decorating, masonry, plumbing, electrical, and blueprint reading

Collision Repair AM (CTC002)
Collison repair prepares students to apply technical knowledge and skills to repair damaged vehicles. Students will use various hand & power tools as well as specialized repair equipment. Areas of instruction includes: examining vehicles and estimating repair costs, repairing dented areas, window & glass replacement, straightening bent frames & uni-body structures, and automobile refinishing processes.

Computer Networking AM (CTC004)
Computer networking is an instructional program that focuses on the design, implementation, and management of linked systems of computers, peripherals and associated software and prepares individuals with the technical skills required to support networks and network users. This includes instruction in: system design, architecture, operating systems, security, communication protocols, trouble shooting and server optimization.

Cosmetology AM (974)
Cosmetology is a program that prepares individuals to apply technical knowledge and skills related to experiences in a variety of beauty treatments including the care and beautification of the hair, complexion and hands. Instruction includes shampooing services, scalp treatments, hair cutting and styling, coloring, facials, manicuring, hand and arm massaging and waxing.

Culinary Arts AM (976)
The Culinary Arts program prepares students for employment related to institutional. Commercial or self-owned food establishments or food industry occupations. Instruction and learning include: nutritional values, principles of cooking, food quantities and presentation, the use and care of commercial equipment as well as safety and sanitation precautions.

Electrical Occupations AM (975)
This instructional program prepares individuals to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically energized residential, commercial and industrial systems, controls and electrical distribution panels. Instruction emphasizes: application of mathematics, practical use of science, interpreting circuit diagrams, blueprint reading and sketching

Health Occupations AM (977)
This is a program with a combination of subject matter and experiences designed to prepare individuals for entry level employment in several health occupations fields under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experience in one or two health related occupations. The core curriculum includes: basic anatomy & physiology, medical terminology, legal & ethical concepts of healthcare, clinical experiences in one of two healthcare professions.

HVAC & Refrigeration AM (CTC007)
HVAC-R is an instructional program that prepares students to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. The course contains teaching on basic principles of HVAC-R including: Filtering and controlling humidity, operating characteristics of various units & parts, blueprint reading, diagnosing malfunctions, repair and adjustments of pumps, compressors, valves, etc.

Public Health & Safety AM (CTC008) PHS is an ell-encompassing look at public safety careers. The program covers Fire, EMS, Law Enforcement, Homeland Security, Corrections and Private Security. The program does not concentrate on any one aspect but exposes students to hundreds of careers with the realm of public safety. Through a combination of classroom and hand on training, the students learn about topics not limited to: fire suppression, emergency medical care & treatment, handling of suspects & prisoners, scene investigation & evidence collecting, incident command, hazardous materials, 911 center operations, retail security, active shooter and basic self-defense tactics.

Sports Exercise & Rehabilitation Therapy AM (CTC010)
SERT is a program that prepares students to apply technical knowledge and skills in the medical field. The class helps prepare students to pursue degrees in Physical Therapy, Athletic Training and many other 2 year and 4-year degree programs, as well as working directly in the medical field as an assistant. Areas of instruction include: proper safety & health practices, prevention, evaluation & rehabilitation of injuries, identifying types of medical equipment, treatment measures for different kinds of injuries, taping & bracing techniques and proper documentation of rehabilitation.

Welding AM (991)
The Welding program prepares individuals to apply technical knowledge and skills in gas, arc, shielded & non shielded metal arc, brazing and flame cutting. Hand, semi-automatic and automatic welding processes are also included in the instruction. Students learn safety practices, types and uses of electrodes & welding rods, properties of metal, blueprint reading, electrical principles, welding symbols, fabrication techniques and the use of various hand and power tools.

Scan this QR code or use this Career and Technology New Student Application Link for student registration form.