



Juniata Valley Jr/Sr High School

2012 - 2013

Course Description Booklet

Mission Statement: The Juniata Valley School District prepares students for life by deepening intellectual understanding and fostering

self-worth and respect for others consistent with the needs of our environment and the expectations of our ever-changing society.

GRADUATION REQUIREMENTS

Graduation from Juniata Valley High School will be based on the achievement in the four years represented by grades nine, ten, eleven, and twelve. Graduation requirements follow the state mandated requirements including a graduation project and additional requirements established by the Juniata Valley School District.*

1. 4.0 credits of English
2. 4.5 credits of Social Studies to include the following:
 - a. 9th Grade Early U.S History (1.0 credits)
 - b. 10th Grade Pennsylvania History (.5 credits) and World Studies (1.0 Credits)
 - c. 11th Grade American History (1.0 credits)
 - d. 12th Grade Economics (.5 credits) and U.S. Government (.5 Credits)
 - e. Students completing programs at the HCCTC will choose between taking World Studies and American History. They will also choose between taking Economics and U.S. Government
3. 4.0 Credits of Mathematics to include Algebra I (or Algebra IA and IB) and Geometry **or** Algebra II
 - a. Students who complete programs at the HCCTC will earn 1.0 Mathematics credit.
4. 2.0 credits of Fine Arts and Humanities
 - a. Students who complete programs at the HCCTC will only be required to take 1 year of Fine Arts and Humanities (.5 or 1 credit)
5. 4.0 credits of Science to include Biology (1.0 credits) and Ecology (1.0 credits)
 - a. Students who complete programs at the HCCTC will earn 2.0 elective credits in science.
6. 1.75 of Physical Education
 - a. 9th Grade – (.5 credits)
 - b. 10th Grade – (.25 credits)
 - c. 11th Grade – (.5 credits)
 - d. Students who complete programs at the HCCTC will be allowed to complete up to .5 credits of Contract PE if needed.
7. 1.0 credit of Health
 - a. 9th Grade – (.5 credits)
 - b. 11th Grade – (.5 credits)
8. .25 credits of Driver's Education
 - a. 10th Grade – (.25 credits)
9. 1.0 credit of Business, Technology, and Computer Software to include Personal Finance (.5 credits) and Microsoft Office Suite (.5 credits)
10. 4.0 credits of Electives (Once a requirement has been met in a discipline, elective credits will be issued for additional courses.)
 - a. Students who complete programs at the HCCTC will earn 3.0 elective credits.

*Any three or four credit college course would count as one high school course in the appropriate area above.

The minimum number of credits needed for promotion to tenth grade is six (6), to eleventh grade is twelve (12), and to twelfth grade is eighteen (18). A subject must be fully completed to earn credit. Partial credit will not be given. Six credits must be taken during the senior year.

In addition to courses offered at Juniata Valley High School, students may enroll in courses at the Huntingdon County Career and Technology Center, or other online providers such as Lincoln Interactive (fee required). Credits earned in all settings in grades 9-12 will be applied toward graduation. Students completing studies under an Individual Education Plan (IEP) and/or Gifted Individual Education Plan (GIEP) must achieve the goals of the IEP and/or GIEP to graduate, including those of the required transition plan.

Recommended Courses for Postsecondary Planning **Grades 9 – 12**

4-Year College Preparation-

(In order to consider attending a four-year baccalaureate program, the following courses are necessary especially if no one particular college is a final selection at this point.)

Four years of English (preferably college prep or honors); four years of social studies; four years of science; four years of mathematics including Algebra I, Plane Geometry, Algebra II, and Trigonometry or College Algebra; one semester each of the following courses: computer, finance and economics; two to four years of a foreign language; two years of health; three years of physical education; plus remaining electives.

2-Year College Preparation-

Four years of English; four years of social studies; four years of science; four years of mathematics (including algebra and geometry); one semester each of the following courses: computer, finance and economics; two years of health; three years of physical education; four years of career preparation courses in a particular area such as agricultural studies, business technology, or a HCCTC program.

1 to 2-Year Technical/Trade School Preparation-

Four years of English; four years of social studies; four years of science; four years of mathematics (including algebra and geometry); one semester each of the following courses: computer, finance and economics; two years of health; three years of physical education; three or four years of career preparation courses in a particular area such as HCCTC (Huntingdon County Career and Technology Center) program offerings or agricultural studies or business technology.

School-to-Work Programs-

Students who intend to go directly to work and who have had the opportunity to train (primarily at HCCTC or a family business) and to complete required certifications are still expected to enroll in: four years of English; four years of social studies; four years of science; four years of mathematics; two years of health, three years of physical education; and four years of a work-related program which must include one semester each of the following courses: computer, finance and economics.

REQUIRED CLASSES

7th Grade-

English 7
Reading and Writing Skills 7
Math

- General Math 7
- Pre-Algebra B1
- Pre-Algebra 7
- Pre-Algebra (AC)

Science 7(Rotation)
World Geography 7
Rotation (9 weeks each)

- Art
- Environmental Science
- Technology 2.0
- Music

Health and Physical Education
Electives: Chorus and/or Band

8th Grade-

English 8
Reading and Writing Skills 8
Math

- Pre-Algebra B1
- Pre-Algebra B2
- Algebra I A
- Algebra I (AC)

Science 8 (Rotation)
World Studies 8
Rotation (9 weeks each)

- Art 8
- Intro to Spanish
- Agricultural Science
- Music 8

Health and Physical Education
Electives: Chorus and/or Band

9th Grade-

English 9 (Honors, College Prep or Applied)
Math

- Pre-algebra B2
- Algebra I A

-Algebra I B
-Algebra II (AC)
Biology
Early U.S. History
Health and Physical Education
Microsoft Office Suite (semester)
PSSA Remediation (with teacher recommendation) (.5 credits if needed)
Electives – 2.5 credits

10th Grade-

English 10 (Honors, College Prep or Applied)
Math
 -Accounting I
 -Algebra I A
 -Algebra I B
 - Algebra II (AC)
 -Plane Geometry
 -Plane Geometry (AC)
Ecology
World Studies 10
Pennsylvania History (semester)
Driver's Education and Physical Education (semester)
PSSA Remediation (with teacher recommendation) (.5 credits if needed)
Electives – 2.5 credits

11th Grade-

English 11 (Honors, College Prep or Applied)
Math
 -Accounting I
 -Algebra I B
 -Plane Geometry
 -College Algebra
 -Algebra I A
 -Algebra II
 -College Algebra & Trigonometry)
Science
 -Chemistry
 -Earth Science
 - Animal Science
 -Wetlands and the Environment (semester)
 -Natural Resources (semester)
American History
Health and Physical Education
PSSA Remediation (with teacher recommendation) (.5 credits if needed)
Electives – 3.0 credits

12th Grade-

English 12 (Honors, College Prep or Applied)

US Government (semester)

Personal Finance (semester)

Economics (semester)

Math

-Accounting I

-Accounting II

-Plane Geometry

-Algebra II

-College Algebra

-College Algebra & Trigonometry

-Pre-Calculus / Calculus

Science

-Earth Science

-Wetlands and the Environment (semester)

-Physics (Prerequisite Chemistry

-Natural Resources (semester)

-Anatomy

Electives – 3.0 credits

Graduation Reading and/or Mathematics (based on PSSA Retest)

Total credits needed for graduation in grades 9 through 12 – 26.5

LANGUAGE ARTS

ENGLISH

100 English 7: This course will complement the 7th grade Reading and Literature course. Students will do various types of writing activities to prepare them for both the PSSA test, as well as future high school writing assignments. Students will explore narrative, persuasive, and informative writing, as well as poetry and free writing. Grammar instruction will go hand in hand with the writing, but students will be doing separate grammar lessons and exercises, particularly with more difficult concepts. Students will also keep a journal and write in it on a weekly basis. The journal will be a collection of various assignments and prompts assigned by the teacher. (1.0 cr)

101 Reading and Literature 7: This course will complement the students' English and writing course. However, it will primarily focus on building reading skills through the reading of and written response to a wide variety of literary genres in conjunction with the Glencoe literature textbook. Reading skills are also heavily focused on through the Accelerated Reader Program, Study Island, and PSSA Coach. Vocabulary skills will be taught through an organized weekly vocabulary program. (1.0 cr)

102 Reading and Literature 7 Springboard: This course will complement the students' English and writing course. However, it will primarily focus on building reading skills through the reading of and written response to a wide variety of literary genres in conjunction with the *Springboard* workbook. Reading skills are also heavily focused on through the Accelerated Reader Program, Study Island, and PSSA Coach. Vocabulary skills will be taught through an organized weekly vocabulary program. (1.0 cr)

103 Reading and Writing 8: This course is a supplementary course to the regular English class and will focus on preparing students for the PSSA exams. Students will learn reading and writing skills through guided lessons and independent work. Throughout the year, students will read and analyze various types of literature and complete different types of writing assignments. The computer-based program Study Island, as well as the PSSA Coach Book, will be used in class regularly. These materials focus specifically on teaching content and skills related to the PSSA. Accelerated Reader is also a part of this course and each week students will be given one class period to read their AR books. (1.0 cr)

106 English 8: This course includes a comprehensive study of grammar (parts of speech, subject-verb agreement, and sentence structure) and punctuation (end marks, commas, etc.). Writing is emphasized through various writing assignments including short stories, poems, and personal essays across three domains: narrative, informative, and persuasive. Vocabulary is presented through an organized vocabulary program, words from literature, and literary terms. Literature highlights American folklore, short stories, poetry, the novel *The Pearl*, and the drama *The Diary of Anne Frank*. (1.0 cr)

112AC English 9 – Honors: This is a highly intensive instructional area for the student hoping to take Advanced Placement English and for the student planning on attending college. Emphasis will be placed on literature and written response to literature. Grammar and usage will be taught through various writing responses and students will be expected to follow a demanding reading schedule. Independent, critical, and creative thinking will be essential learning tools as we work through essays, novels, poetry, plays, and short stories. Class discussion and communication skills will be polished, as will note-taking skills. There will be numerous supplemental activities to enhance the typical 9th grade literature and writing program. An intensive vocabulary curriculum will be addressed, along with PSSA preparation. There will be a wide variety of test assessments and activities. A thorough evaluation of Shakespeare's *Romeo and Juliet* will be a core part of the program. This is a weighted course. **Prerequisite: Student must have recommendation of English department.** (1.0 cr)

112CP English 9 – College Prep: This course focuses on preparing students for higher grade level work in literature, writing, and communication. Students will cover a wide variety of literature and writing techniques, including in-depth examination of Shakespeare's *Romeo and Juliet*, Harper Lee's *To Kill a Mockingbird*, and Homer's *The Odyssey*. In addition to these works, students will be reading a wide variety of poems and short stories. Throughout the year, students will spend time analyzing these various literary genres through discussion and writing. This course also includes the review and development of grammar, usage, and mechanical skills introduced in earlier grades as well as weekly vocabulary lessons. (1.0 cr)

112 English 9: This practical approach to reading and writing skills will focus on the writing process as a whole and will examine paragraph construction, 5 paragraph essay writing, editing skills, proof reading skills, and basic writing skills. Students will study the skills necessary for passing the PSSA test, as well as communication skills needed for writing across the curriculum. Hands-on projects and various assessments will give the students the opportunity to explore literature and technology will be a component of this course. Weekly vocabulary will prepare students to be life-long learners and productive members of the workforce. Students will learn note taking skills, as well as grammar and usage basics. (1.0 cr)

114AC English 10 – Honors: This course includes a comprehensive study of classic literature through the reading of and the written response to Shakespeare, novels, short stories, plays, and/or poetry. Grammar is presented through a review of phrases, clauses, and usage, with a heavy emphasis on the comma. In addition to words from literature, and/or literary terms, vocabulary requirements are met through an organized vocabulary program through Shostak's *Vocabulary Workshop*. Students will complete a thorough book review and research paper, as well as specific group and/or individual research projects, which are held to a collegiate-like level of scrutiny. This is a weighted course. **Prerequisite: Student must have recommendation of English department.** (1.0 cr)

114CP English 10 – College Prep: English 10 includes a comprehensive study of literature through the reading of and the written response to Shakespeare, novels, short stories, plays, and/or poetry. Grammar is presented through a review of phrases, clauses, and usage, with a heavy emphasis on the comma. Vocabulary requirements are met through an organized vocabulary program, words from literature, and/or literary terms. Students will complete a

thorough book review and research paper, as well as specific group and/or individual research projects. (1.0 cr)

114 English 10: This course is focused towards students likely to enter the workforce upon graduation. Literature and reading is practiced through the reading of contemporary novels, stories, and essays. Vocabulary is improved through a weekly vocabulary program. Grammar and punctuation requirements are met through a review of general rules that can be practically applied in writing. Writing and composition is emphasized through the construction of several basic narrative, informational, and persuasive essays, which are applicable to the world of work and determined by the Pennsylvania State Standards. (1.0 cr)

115AC English 11 – Honors: This course involves high levels of American Literature and writing combined to prepare the most advanced students for college preparation. Students taking this course must be prepared to read more than one piece of distinguished American literature at a time, and juggle more than one assignment at a time. Writing is a major component of this course and it will help prepare students for PSSA and S.A.T./A.C.T. testing. Emphasis in writing and literature will strongly include analysis, purpose, inference, and symbolism found within American literature. Accelerated students will be preparing to take the Advanced Placement course their senior year. An in depth, accelerated vocabulary course will be taught with the inclusion of Latin/Greek roots. Resume and cover letter writing are also included in this fast-paced course. Independent and critical thinking skills are encouraged and fostered in this course. This is a weighted course. **Prerequisite: Student must have recommendation of English department.** (1.0 cr)

115CP English 11 – College Prep: This course includes an in-depth study of American Literature. Included will be short stories, poetry, essays, and novels written by America's most distinguished and remembered authors. Emphasis will be placed on analysis of material. Writing will be a major component of this course, focusing on skills for the PSSA and future college courses. These writings will include essay responses, research and writing, poems, guided writing prompts for PSSA testing, and journal writing. A resume and cover letter will also be completed, as well as a comprehensive study of college prep/S.A.T. prep vocabulary. This vocabulary study will prepare students for S.A.T. and A.C.T. testing. There will also be the reading of Shakespeare's *Hamlet* or possibly a comedy by Shakespeare. All students will be exposed to Latin/Greek vocabulary roots for S.A.T. testing. Grammar will be taught within writing skills to prepare the student for college level writing. (1.0 cr)

115 English 11: This is a course for the student who is more likely to enter the workplace after graduation. It will target needed PSSA areas by working on the applications needed to be proficient on the PSSA test. This course will also provide a wide variety of writing and communication skills. Students will be engaged in note-taking and career preparation activities, along with in depth work on their graduation project. Hands-on and writing activities will accompany literature units. Workplace communications and writings will also be covered, as well as practical grammatical issues. (1.0 cr)

123 College English 12: This course is based on a syllabus prepared in conjunction with Mount Aloysius college and can be taken for 6.0 college credits. (1.0 cr)

118AC English 12 – Honors: This course includes an intense study of British authors and their writings. The study is addressed through the readings beginning with the Old English Period and continuing through the Modern and Post-modern Periods. Readings include novels, short stories, essays, plays, letters, speeches, and poetry. Students' writing will be addressed through responses to literature and numerous supplemental writing assignments representing all styles. Emphasis will be placed on analysis of the material and identification of the authors' use of literary devices. This fast-paced course will also emphasize research using the APA format. This course will also address all material the college prep English 12 course will. This is a weighted course. **Prerequisite: Student must have recommendation of English department.** (This is for the first year. Any subsequent years will be AC English 10 and 11.) (1.0 cr)

118CP English 12 – College Prep: This course includes a study of British authors and their writings. The study is addressed with readings beginning with the Old English Period and continuing through the Modern and Post-modern Periods. Readings include novels, short stories, essays, plays, letters, speeches, and poetry. Students' writing will be addressed through responses to literature and numerous supplemental writing assignments touching on all styles. More emphasis will be placed on reacting to the readings through student writing in preparation for college writing. Review of literary devices based on prior knowledge. The APA format for research will be introduced with the research paper requirement. The essay response will also be emphasized to prepare students for college freshman composition. (1.0 cr)

118 English 12: This English course is for the student not furthering his/her education upon graduation from high school. This includes an exposure to British authors and their writings. This exposure will concentrate on comprehension and analysis through written and oral responses. Emphasis will be placed on grammar, usage, and mechanics with supplemental materials for practice. The various forms of written and electronic communication will be studied with emphasis placed on the skills needed in the work place. (Supported by presentations/discussions with local business leaders.) (1.0 cr)

123-A English Composition I*: This course will explore and emphasize writing the following types of essays: expository, narrative, personal, definition, cause and effect, synthesis and persuasive/argumentative. Students will write clear, concise paragraphs which will ultimately result in writing coherent and well-organized essays. Students will understand and participate in the following writing processes: drafting, editing, revising and finishing. Students will review research skills and write an argumentative research paper. Finally, throughout this semester course, students will be reviewing and demonstrating the use of proper grammar and mechanics. Grade 12. This course is weighted. **Prerequisites: An "A" in Accelerated English 11 and an English teacher's recommendation are needed for acceptance into this program because of the academic rigor.** (0.5 cr)

123-B English Composition II*: This course will explore the various literary genres and authors' use of literary terms and techniques. Major themes found in essays, short stories, poetry, and drama will be studied with emphasis placed on student response. Critical reading,

rhetorical analysis, synthesis, and essay writing will be specifically addressed and required throughout this semester course. Grade 12. This course is weighted. **Prerequisite: English Composition I. (0.5 cr)**

131 PSSA Reading Remediation: Students will prepare to achieve a proficient or advanced level on the PA State System of Assessment. The course will focus on state standards in reading. The class will meet two, three, or five days per week depending on the grade level and remedial need. Grades 7-12. (0.5 cr)

134 ESL (English/Second Language): This program features essential language components, authentic communication, and academic support services to enhance success in all areas of the curriculum for students whose second language is English. Grades 7-12. Approval of Student Personnel Services Coordinator.

135 Writing for Publications I: Students in this course will generate free-writing in a journal, study models of good writing, and experiment with poetry and prose. Students will develop a sense of speaker and audience. They will provide positive support for their fellow writers and learn to revise their work using concrete, sensory details and appropriate choice of diction, syntax, purpose, and audience. Students will also learn techniques of journalistic writing. Students may submit their writing to the school newspaper for consideration. Grades 9-12. (0.5 or 1.0 cr)

**May be used as an elective when taken with English 11 and/or English 12.*

136 Writing for Publications II: Students will learn techniques of journalistic writing, utilize existing technology, and apply these skills to publishing newspapers and other media. Activities include gathering information, writing various types of stories, straight news, features, editorials, sports, etc., layout and design, editing and marketing. Writing for pleasure will also be explored. Students may submit their writing to the school newspaper for consideration. However, students who display a hard work ethic may be invited to join the school newspaper. Grades 9-12. (0.5 or 1.0 cr)

140 Spanish Conversation 8: Students will learn common Spanish expressions and other fundamental vocabulary. Students will have a better understanding about Spanish in the United States and in the world, and learn cultural facts about Spanish speaking countries. Through the course students will have the chance to use and practice the expressions and other learned vocabulary. Quarter. Grade 8. (.25 cr)

142 Spanish I: This course is an introduction to the language and culture, including listening, speaking, reading, and writing. Students will be using vocabulary, understanding grammar concepts, and exploring culture. The students will learn these topics by using the following actions: viewing visual vocabulary, listening to pronunciation, conversing in dialogs, performing hands-on projects, viewing cultural videos, applying previous knowledge with review games, reading stories, writing sentence structure, and using technology for understanding of the language. Grades 9-11. **Prerequisite: Final grade of C or higher in previous year's English class.** (1.0 cr)

144 Spanish II: The skills learned in the first year will be strengthened and further developed by studying more grammatical structures, enlarging vocabulary, and increasing communication in the language. Students will be using vocabulary, understanding complex grammar concepts, and exploring culture. The students will learn these topics by using the following actions: viewing visual vocabulary, listening to pronunciation, conversing in dialogs, performing hands-on projects, viewing cultural videos, applying previous knowledge with review games, reading stories, writing complex sentence structure, and using technology for understanding of the language, and using an interactive online plot software tool. Grades 10-12. **Prerequisite: Final grade of C or higher grade in Spanish I.** (1.0 cr)

146 Spanish III / 148 Spanish IV: Students gain language competency as they progress through intermediate and advanced grammar skills and vocabulary and communicate in Spanish. Students will be using vocabulary, understanding and constructing complex grammar concepts, exploring culture, and using the language verbally in the classroom. The students will learn these topics by using the following actions: viewing visual vocabulary, listening to pronunciation, conversing in dialogs, performing hands-on projects, viewing cultural videos, applying previous knowledge with review games, reading stories and literature pieces, writing and constructing complex sentence structure, and using technology for understanding of the language, and using an interactive video plot online software tool. Grades 11-12. **Prerequisite: Final grade of C or higher grade in Spanish II/III.** (1.0 cr)

SOCIAL STUDIES

200 World Geography 7: This course is designed to provide the student with a thorough knowledge of local, national, and world geography. Emphasis includes, but is not limited to, the solar system, the earth's physical features, climate zones, human interaction with the environment, and political boundaries. (1.0 cr)

202 World Studies 8: This course is intended to develop an appreciation for humankind's constant striving for a higher level of culture and a more democratic life. An emphasis is placed on: contributions that other peoples have made to society, America's place in the world, and an understanding of the effects of environment, climate, and resources in our world. (1.0 cr)

204 Early United States History 9: The Europeans, the settlement and the growth of the thirteen colonies and the western movement and settlement of the West will be covered in this course for students to gain a thorough knowledge of the early discovery of America. Major areas of study include (but are not limited to) the forging of a new nation, the establishment of the United States and the United States Constitution. This course will conclude with the events leading to and the outcome of the Civil War. (1.0 cr)

205 Pennsylvania History: This course is designed to emphasize historical readings and writings of Pennsylvania. Using the PSSA parameters as the basis to reading selections and

written reactions, Pennsylvania's government and history will be discussed as well as the state's vital role within the United States. Semester: Grade 10. (0.5 cr)

206 World Studies: This course is designed to provide the student with specific knowledge of geographic, cultural, economic and social aspects of major foreign nations that are quite different from those of the United States. The students will learn about different major world religions and how they affect governments and people of the world. The students will learn about forms of government and economic systems different from their own and explore how these differences effect relations among nations. Grade 10. (1.0 cr)

208 American History: This course will give students an overview of the 20th century and emphasize the growth of the United States as a world power. The students will study the past in order to find their place in the present and to plan for their future. Major areas of study include (but are not limited to): Reconstruction, The Progressive Era, World War I, the Stock Market Crash, World War II, the Korean War, the 50s and 60s, the Vietnam War, and the changes in the American Society during the 70s, 80s, 90s, and into the 21st century. Grade 11. (1.0 cr)

211 United States Government: This course is designed to develop an interest and essential understanding of government at the local, state, and national levels. It provides a basis for understanding democracy in comparison to other forms of government. This course will also give the students the foundation to become active participants in the governmental process. Semester. Grade 12. (0.5 cr)

812 Economics: In this course the students will learn to identify various economic systems, understand the concept of supply and demand, and identify the role of economy in the environment. Additionally, each student will prepare an individualized budget, balance and evaluate personal finances, and learn the effects of interest rates as they apply to purchases and investments. This practical course will prepare students to manage their own finances and make decisions based on real-life situations. Semester. Grade 12. (0.5 cr)

213 Intro to Psychology: The first semester covers topics such as the brain and behavior, perception and sensation, learning, human development, experimentation and abnormal psychology. The second semester continues the study of psychology, focusing on personality, intelligence, gender difference, dreams, therapy, and sociocultural influences. Classroom discussion is required along with readings from the text. The goal of the course is for students to better understand human behavior. Semester or year. Grades 10-12. (0.5 or 1 cr)

218 Military History: This survey course covers the military in American History from 1763 to the present day, from the French and Indian War to the current war in Iraq. Focus will be upon 20th century warfare, life of a soldier, and the emergence of modern technology and weaponry. In addition, this course will study how American military history has effected and influenced today's society and culture. Semester. Grades 9-12. (0.5 cr)

MATHEMATICS

300 General Math 7: This course includes a review of the number system and the binary operations of whole numbers, fractions, and decimals. There is also a study of ratio, proportion, and percent with a basic introduction to solving equations, a brief review of polygons, perimeter, area and measurement. **Permission of Grade 6 math teacher.** (1.0 cr)

302 Pre-algebra 7: This course is intended to introduce concepts of algebra, such as working with variables, evaluating expressions, solving equations and inequalities, and graphing. Concepts of integers, rational numbers, measurement, ratio, proportion, percent, and basic geometry are included. **Permission of Grade 6 math teacher.** (1.0 cr)

304 Pre-algebra 7 (AC): This accelerated course is intended to introduce concepts of algebra, such as working with variables, evaluating expressions, solving equations and inequalities, and graphing. Concepts of integers, rational numbers, measurement, ratio, proportion, percent, and basic geometry are included. **Permission of Grade 6 math teacher.** (1.0 cr)

306 Pre-algebra B1: This course is intended to introduce concepts of algebra, such as working with variables, evaluating expressions and solving equations. Concepts of integers and rational numbers are included. Grade 8. **Permission of Grade 7 math teacher.** (1.0 cr)

307 Pre-algebra B2: This course is intended to introduce concepts of algebra, such as working with variables, evaluating expressions, solving equations and inequalities, and graphing. Concepts of integers, rational numbers, measurement, ratio, proportion, percent, and basic geometry are included. Grade 9. **Permission of Grade 8 math teacher.** (1.0 cr)

318 Algebra I 8 (AC): This accelerated course includes a study of number relations, linear and quadratic equations, formulas, operations with polynomials, special products and factoring, inequalities, and algebraic fractions. Verbal problems for the application of most of the above areas are used throughout the course. **Prerequisite: Grade of C or higher in Pre-algebra (AC) and permission of instructor.** (1.0 cr)

319 Algebra I: This course includes a study of number relations, algebraic equations and inequalities, graphing functions, linear equations, systems of equations and inequalities, exponents and exponential functions, and an introduction to operations with polynomials and factoring. Word problems are used to illustrate applications of the above concepts throughout the course. Grades 9-12. **Permission of instructor.** (1.0 cr)

324 Algebra I A: This course includes a study of number relations, rational number operations, algebraic equations and inequalities, graphing functions, linear equations and an introduction to systems of equations and inequalities. Word problems are used throughout the course to illustrate applications of the above concepts. Grades 8-11. **Permission of instructor.** (1.0 cr)

325 Algebra I B: This course includes a study of number relations, algebraic equations and inequalities, operations with polynomials, special products and factoring, rational expressions, linear equations, and systems of linear equations. Word problems for the applications of some of the above areas are used throughout the course. Grades 9-12. **Permission of instructor.** (1.0 cr)

326 Algebra II (Honors): This accelerated course includes a study of number sets and their axioms, equalities and inequalities, both linear and quadratic. Emphasis is placed on the algebra of relations and functions, including the geometric interpretation of conic sections. Grade 10. This class is weighted. **Prerequisite: Grade of C or higher in Algebra I AC and Plane Geometry plus permission of instructor.** (1.0 cr)

328 Algebra II: This course includes a study of number relations, algebraic expressions, equations and inequalities, polynomials, rational expressions, and irrational and complex numbers. Word problems for the application of most of the above areas are used throughout the course. Grades 11-12. **Prerequisite: Algebra I and Plane Geometry plus permission of instructor.** (1.0 cr)

330 Plane Geometry: This course is intended to develop the student's logic and reasoning skills, through the use of both proof and application problems. Course content includes geometric figures, congruence, lines and planes in space, polygons, similarity, the circle, Pythagorean theory, perimeter, area, volume, surface area, and two and three dimensional shape properties. This course moves at a steady pace and places less emphasis on the 2-column proof. Grades 10-12. **Prerequisite: Algebra I and permission of instructor.** (1.0 cr)

331 Plane Geometry (Honors): This accelerated course is intended to develop the student's logic and reasoning skills, through the use of both proof and application problems. Course content includes geometric figures, congruence, lines and planes in space, polygons, similarity, the circle, Pythagorean theory, perimeter, area, volume, surface area, and two and three dimensional shape properties. This course moves at a more rigorous pace and is an excellent course to prepare for any type of computer programming or math-related college major. Grades 9-10. This class is weighted. **Prerequisite: Algebra I AC and permission of instructor.** (1.0 cr)

332 College Algebra/Trigonometry*: This course includes $\frac{1}{2}$ year of advanced algebra and $\frac{1}{2}$ year of trigonometry which will prepare the student for college mathematics. Topics to be covered will include equations and graphing, linear systems, functions and inverse functions and properties, the complex number system and roots, conic sections and properties, right triangle trigonometry, trigonometric functions, trig identities and graphs, the Law of Sines and Cosines as well as radian measure and polar coordinates. This course will be conducted at a more rigorous pace and will provide the students with the foundations for college mathematics. This course is weighted. Grades 10-12. **Prerequisite: Algebra II, Plane Geometry, and recommendation of instructor(s). Eligible for college credit through Penn Highlands Community College.** Year (1.0 cr)

335 College Algebra*: This course is intended as an advanced algebra course for those students who plan to attend college, but not major in mathematics or engineering. The topics covered will include equations and graphing, linear systems, functions and inverse functions and properties, the complex number system and roots, conic sections and properties, and an introduction to right triangle trigonometry and the trigonometric functions. This course is weighted. Grades 11-12. **Prerequisite: Algebra II, Plane Geometry, and recommendation of instructor(s). Eligible for college credit through Penn Highlands Community College.** (1.0 cr)

333 Pre-calculus*: This course is designed for the student who needs to strengthen the algebraic and geometric skills necessary for calculus. The student will use trigonometric functions, curve plotting, determinants, relations, graphs, logarithms, exponential functions, inequalities, ratios, sequences and series, and limits. Semester. Grades 11-12. This course is weighted. **Prerequisite: Trigonometry and permission of instructor. Eligible for college credit through Penn Highlands Community College.** (0.5 cr)

348 Calculus*: This course covers the derivatives of algebraic and basic trigonometric functions, anti-derivatives, integral functions of one variable and their applications, limits and continuity. Semester. Grades 11-12. This course is weighted. **Prerequisite: Pre-calculus and permission of the instructor. Eligible for college credit through Penn Highlands Community College.** (0.5 cr)

334 PSSA Math Remediation: Students will prepare to achieve a proficient or advanced level on the PA State System of Assessment. The course will focus on state standards in mathematics. The class will meet two, three, or five days per week depending on grade level and remedial need. (0.5 cr)

FINE ARTS AND HUMANITIES

ART

700 Art 7: This class offers a broad range of visual art experiences based on art works and styles of various cultures and times in history. The lessons present art concepts and styles and help increase cognitive learning. The studio lessons provide manipulative experiences that build on the narrative lesson and give students the opportunity to use various media and techniques. Quarter. (.25 cr)

701 Art 8: This course will further expand students' knowledge and exploration of art mediums including sculpture, clay and drawing. In this class students will also study art history, specific artists, styles and periods. This course meets daily for one marking period. Quarter. (.25 cr)

702 Art 9: Art 9 is a drawing class. The students will learn various traditional and experimental techniques such as graphing, contour drawing, shading techniques using tortillons line drawing, perspective, and the basics of realistic drawing. Portrait, figure drawing, still life,

and landscape subject matters are covered. The students will work with a variety of materials, degrees of pencil, graphite, charcoal, kneaded erasers, pastels, and the colored pencils. **Prerequisite: B or higher in Art 7.** Semester. (0.5 cr)

704 Art 10: The Art 10 program is designed to challenge the students' talents and to develop techniques in many different types of media. Among these will be continuing pastel work, painting using acrylic paint on canvas, clay sculpture using Fimo polymer clay, and pen and India ink techniques. Students will also study master artists on their techniques through the use of videos, art appreciation and art history through the use of prints, videos, and the textbook Art in Action. **Prerequisite: B or higher in Art 9.** (1.0 cr)

705 Art 11: Art 11 is intended for the talented, highly motivated third year art student. Art vocabulary introduced in Art 9 and 10 is reviewed, expanded, and refined in a systematic way. The students are encouraged to employ their expanding knowledge to reproduce art that is more interesting, complex, and original. Projects considered appropriate for students in Elective Art 11 are: drawing using pencil, pen and India ink, charcoal, colored pencil, and chalk pastel; and painting using acrylic paints, water color, tempera, and mixed media. Two-dimensional activities would include mosaic on wood, greeting card contest, poster designs, copper tooling or paper stained-glass windows. Three-dimensional activities include sculpture with clay, carving blocks of plaster or Styrofoam. **Prerequisite: B or higher in Art 10.** (1.0 cr)

706 Art 12: Art 12 is an advanced art course intended for the talented, highly motivated fourth year art student. At this level, the student demonstrates expertise in various media by successfully and independently manipulating a wide variety of tools and materials. Possibilities for creative expression on this level are endless. Lessons and activities are designed to complement the student's mature abilities with styles and imagination. Projects considered appropriate for advanced Art 12 include the following: drawing using charcoal, pencil, colored pencil, pastel pencils, rapid-o-graph ink pens, and chalk pastels; and painting using enamel, acrylic, tempera, mural painting, as well as wet and dry watercolor painting. Two-dimensional activities include mosaics (glass and tile) on wood, greeting card contest, collage, decorative lettering. Three-dimensional activities include plaster or wood carving, fabric maché, sculpture in clay and polymer clay, as well as carving blocks of wood, plaster and Styrofoam. **Prerequisite: B or higher in Art 11.** (1.0 cr)

707 General Art: This art course includes the descriptions for Art 704, 705, and 706. It is designed for students who cannot schedule elective art with their regular class. Semester or year. Grades 10-12. **Permission of instructor required.** (1.0 cr)

708 Art Assistant: The Art Assistant program is designed to assist the art teacher in keeping the art room and supplies inventoried, as well as doing in-house art projects. The art assistant may be asked to assist in setting up showcases, bulletin boards, and art shows throughout the year. The art assistant will also use the facilities and materials of the art room to create artwork of his/her own throughout the year. The program is designed for a small select group of hard working art students who want to help with all the extra projects the Art Department becomes involved with during a school year. Grades 11-12. **Prerequisite: Art 9 and Art 10 with a B or higher. Permission of instructor required.** (0.5 or 1.0 cr)

MUSIC

740 Junior High Band: The Junior High Band is a performance-based curriculum. The course is designed to further the students' knowledge of music and increase their reading and playing ability. At the conclusion of the second year, the student will be able to perform music of grade level 2 or better, and perform many of the musical styles. Two performances are scheduled, one in the fall and one in the spring. Grades 7-8. **Prerequisite: Permission of instructor.** (0.5 cr)

744 Senior High Band: Senior High Band is a performance-based curriculum. Advanced playing techniques, styles, and history are covered in this course. At its conclusion, the student will be able to perform in a concert band, perform music at grade level 3 or above, and perform all types of musical styles. Students will be involved in three public concerts. Grades 9-12. **Prerequisite: Permission of instructor.** (0.5 cr)

748 General Music 7: This course exposes the student to the fundamental concepts of music including rhythm, melody, timbre, dynamics, articulation, harmony, texture, form, and expression. It includes a study of the oral and written traditions, especially the development and uses of musical notation. Music appreciation is stressed and the following units will be examined: the development of rock from 1954 to the present; a basic overview of music history including the Baroque Period, the Classical Period, the Roman Period, and 20th Century music; a study of various musical styles including jazz and blues, country and western, folk, and Broadway musicals. Quarter. Grade 7. (.25 cr)

752 Junior High Chorus: During this class, basic choral literature will be taught. Students will learn music in 2-3 vocal parts (harmony) and continue to emphasize the basic elements of music. Various styles of music will be taught. Students will be involved in two public concerts. Grades 7-8. (0.5 cr)

756 Senior High Chorus: An extensive overview of various types of vocal music in four to eight parts. Students will be involved in two public concerts and will be prepared for possible participation in County, District, Regional, All State, and All Eastern Chorus programs. Grades 9-12. (0.5 cr)

760 Chorus Sectionals: This group will be chosen by audition and be expected to perform music in all styles. This group will perform many public concerts and will perform in County Chorus, District, Regional, and All State Chorus. Festival literature and popular show music will be taught. Grades 10-12. **Prerequisite: Permission of instructor. (Auditions will be held prior to final registration.)** (0.5 cr)

762 Voice: Diction (Italian, French, German, English), development of good vocal tone, breathing, pitch, and part singing in various styles, but especially the "classics" will be taught, in addition to solfeggio and music reading. Students will study literature at the county chorus level. 1st Semester. Grade 9. **Prerequisite: Permission of instructor and enrollment in Chorus.** (0.5 cr)

SCIENCE / ECOLOGY/ AG TECHNOLOGY

SCIENCE

401 Science 7 (Rotation): This year long course is a four part rotation covering physical science, life science, earth science, and science remediation. **Physical Science** is designed as an elementary introduction into the physical (as opposed to the biological) sciences. Students will become aware of the physical world in which they live by being introduced to such topics as matter and energy, forces associated with changes in temperature, measurement, electricity, simple machines, atomic structure, the behavior of atoms, and the mathematical interpretation of the aforementioned phenomena through the use of the metric system. **Life Science** is a study of the living world. It begins with the characteristics of living things and then develops a 5-kingdom classification system. Organisms are grouped into one of five kingdoms: monera, protista, fungi, plant, or animal. Each unit is supplemented with hands on activities, labs, and group work. **Earth Science** will provide an introduction to the composition of the Earth, the structure of the Earth, the changing Earth – surface and subsurface activities, the history of the Earth, and new directions in earth science. Laboratory activities will be used to supplement and help interpret the individual units. Finally, PSSA remediation and enrichment in Mathematics will be offered to students as the 4th rotational item.

405 Science 8 (Rotation): This year long course is a four part rotation designed to build upon the 7th grade rotation and will cover physical science, life science, earth science, and introduction to GIS. **Physical Science** is designed as an elementary introduction into the physical (as opposed to the biological) sciences. Students will become aware of the physical world in which they live by being introduced to such topics as matter and energy, forces associated with changes in temperature, measurement, electricity, simple machines, atomic structure, the behavior of atoms, and the mathematical interpretation of the aforementioned phenomena through the use of the metric system. **Life Science** is a study of the living world. It begins with the characteristics of living things and then develops a 5-kingdom classification system. Organisms are grouped into one of five kingdoms: monera, protista, fungi, plant, or animal. Each unit is supplemented with hands on activities, labs, and group work. **Earth Science** will provide an introduction to the composition of the Earth, the structure of the Earth, the changing Earth – surface and subsurface activities, the history of the Earth, and new directions in earth science. Laboratory activities will be used to supplement and help interpret the individual units. Finally, PSSA remediation and enrichment in Mathematics will be offered to students as the 4th rotational item.

406 Wetlands and the Environment*: This course will examine all aspects of a wetland. The students will spend time outdoors at the school's man-made wetland site and at the Juniata River. The course will examine the abiotic and biotic factors that affect a wetland. Students will participate in constructing and improving the existing wetland as well as troubleshooting how outside pollution many affect these sites. Field trips and guest speakers will help shape the course into a quality science elective. Semester. Grades 9-12. (0.5 cr)

408 Biology: This course is a study of the basic processes and groupings of all living things. This study begins by grouping organisms into a five-kingdom system. The processes of metabolism, respiration, photosynthesis, cell division, reproduction, and absorption are compared

and contrasted among the organisms in the different kingdoms. An introductory genetics unit leads to an intense study of human genetics and genetic engineering. Dissections of an earthworm, starfish, fish, and frog allow students to observe the anatomical and physiological differences between invertebrates and vertebrates. Lectures, labs, demonstrations, activities, microscope study, and projects enable students to understand life around them and to enjoy the world of science. Grade 9. (1.0 cr)

410 Ecology: The study of the interaction of living things with their environment. An investigation of matter and its properties is related to the chemical make-up of the environmental factors which includes the land, air and water. The relationships between the abiotic and biotic factors in the environment are examined by performing labs, activities, water testing, soil testing, and microscopy. Types of pollution and their effects on the environment are discussed. This course prepares students to make informed decisions concerning the welfare of not only their future, but also their roles to protect the future for generations to come. Grade 10. (1.0 cr)

411 Earth Science: The units included in this course are as follows: exploring the universe, the composition of the Earth, the structure of the Earth, the changing Earth – surface and subsurface activities, the history of the Earth, and new directions in earth science. Laboratory activities will be used to supplement and help interpret the individual units. Grades 11-12. (1.0 cr)

412 Chemistry I (Honors): This course will be a rigorous survey of topics in chemistry including atomic structure, the periodic table, chemical formulas and balancing equations, the mole, stoichiometry, and the gas laws. This will be a challenging class that all students who plan to attend a four-year college should consider taking. It will require a good basis in mathematics and will focus not only on the fundamentals of chemistry but also on problem solving in general. Since laboratory exploration is an integral part of learning chemistry, there will be two laboratory periods per week. This is a weighted course. Grade 11. **Prerequisite: Algebra II.** (1.5 cr)

415 Chemistry I: This course will be a qualitative survey of topics in chemistry including atomic structure, the periodic table, writing chemical formulas and balancing equations, the gas laws, and acids and bases. It will begin with a complete review of the metric system and unit conversions, as well as other important mathematical basics, but will remain less mathematically rigorous than Chemistry (AC). This will be a challenging class that any student considering a two or four year college should consider. Laboratory exploration will be an integral part of the class, but there will be no separate lab period. Grades 11-12. (1.0 cr)

417 Physics: This course should be taken by any student who plans to enroll in a two or four year college. It is a challenging course that will introduce the student to basic concepts in physics while improving his/her problem solving skills. To accomplish this, a survey of topics such as matter and energy, measurement, motion, work, force, heat, sound, light and electricity will be studied. In addition to the traditional classroom activities, there is an emphasis on laboratory investigations, problem solving and computer modeling. Two additional lab periods are required. Grade 11-12. **Pre-requisite: Chemistry I.** (1.0 cr)

413 Human Biology: This semester long course in a rigorous advanced health/biology course designed to introduce students to the parts and functions of the human body and how these parts work together to create a functional unit. Topics covered will include an orientation to the human body, cells and tissues, major systems of the body, and special senses. Students will complete projects and labs based on lectures. Science in Motion from Juniata College will be utilized to further expand the technology experience. Guest speakers, field trips, and dissection labs will provide a well-rounded course in anatomy and physiology. This course should be taken by anyone who is interested in a health or medical related fields and thinking about pursuing these fields after school. Grades 11-12. This is a weighted course. **Prerequisite: Grade of A or B in Biology. Eligible for college credit through Mount Aloysius College.** (1.0 cr)

608 Natural Resources: This course will allow the student to learn about several of our natural resources which are emphasized by the Soil Conservation Service Envirothon Competition. Those areas include soils, water, forestry, aquatics, and current issues such as air quality. The class is recommended for any student who is interested in nature and has a concern for the environment. Students enrolled in the class can participate in the intra-curricular activities of the FFA. Students will be required to complete a research or work experience project. In addition, a student may receive one additional credit if 120 hours of Supervised Agriculture Experience is substantiated. Semester or year. Grades 10-12. (0.5 cr)

609 Animal Science/Pre-vet Studies: The course is designed for the academic minded students who are interested in learning about the care of animals. Students should have biology before taking this course. The contents of the course will include: safety in handling animals, animal behavior, nutrition, genetics, reproduction, diseases and anatomy of large farm animals plus small animals such as dogs and cats. Leadership skills will be incorporated with the course material. Students will be able to complete a project related to care of animals. Students can compete with other FFA members from around the state in research projects. In addition, a student may receive one additional credit if 120 hours of Supervised Agriculture Experience (SAE) is substantiated. Semester or year. Grades 9-12. (0.5 cr)

AGRICULTURAL SCIENCE

601 Environmental Science 7: This course meets for one quarter of the year. Seventh graders are exposed to a variety of environmental issues. The topics include water and air pollution, soil conservation, and solid waste disposal. Students are eligible to join and compete in FFA activities. Quarter. Grade 7. (.25 cr)

602 Agriculture Science 8: This course is taught as an orientation to the world of agriculture and agriculture related businesses. Students enrolled in this class will spend 45 periods studying the different careers available in agriculture. Students are also familiarized with several additional areas, such as leadership skills, animal science, plant science, ag mechanics, and the intra-curricular organization, FFA. Students in eighth grade are eligible to enroll in the club. Members joining FFA will receive additional training on how to establish on SAE project and record keeping. Quarter. Grade 8. (.25 cr)

605 Agriculture Science 9: This is the first year of a four-year training program in experience projects, salesmanship and leadership skills. Students will receive training in soil science with emphasis placed on soil series, textures, profiles, land use capabilities and soil fertility in regard to Ph and nutrients. They will also be introduced to dairy and livestock breeds with emphasis on origin, selection, and reproduction. Students will receive training on the safe operation of power machines and power hand tools, with tool fitting and repair being incorporated into the course. Students will learn to plan and calculate cost of materials. Time will be provided for the students to plan and calculate cost of materials. Time will be provided for the students to plan to construct a project of their choice and they will need to establish an SAE project. In addition, a student may receive one additional credit if 120 hours of Supervised Agriculture Experience (SAE) is substantiated. Semester or year. Grade 9. (0.5 or 1.0 cr)

606 Agriculture Science 10-11: This course includes the study of animal science as it relates to the production of dairy, swine, beef, sheep, fish, and horses. Shop skills taught will include electric and gas welding, small engine repair and the safe use of power hand tools and large equipment. Course will include a unit in plant science which will cover principles of plant growth, land evaluation, and soil fertility. Shop skills taught the second year will emphasize electrical wiring and basic plumbing skills. Students will develop employable skills in management, salesmanship, and leadership. Skills are taught to improve the students' knowledge and ability to own or operate their own ag-business. Students will be required to complete required shop projects. Time will be provided for students to design and construct projects of their choice. The course will incorporate the use of English, math and science skills. Students will learn to use the computer for calculating and storing financial records and communicating. In order to receive credit for the course, the student must successfully complete a supervised agriculture project. In addition, students may receive one additional credit with 120 hours of Supervised Agriculture Experience (SAE) or if they have a substantial ag-business established. Students will compete in FFA sponsored activities to develop leadership skills. Semester or year. Grades 10-12. (0.5 or 1.0 cr)

607 Agriculture Science 12: This course incorporates the study of mathematics into the field of agriculture and agriculture-related business. Students will develop the management and leadership skills needed to establish a business. These skills will help to improve the students' knowledge and skills necessary in ag mechanics. Students can also work on improving their skills with welding equipment, small gasoline engines, and electricity. The class also incorporates the use of English and science skills and the students are encouraged to make use of the computer for assignments. College-bound students are encouraged to enroll for "hands-on-training" while taking the traditional academic education classes. In order to receive credit for this course, the student must successfully complete a home, farm, or off-farm project (project must be approved by the teacher). In addition, a student may receive one additional credit if 120 hours of Supervised Agriculture Experience (SAE) is substantiated. Semester or year. Grade 12. (0.5 or 1.0 cr)

610 Agriculture Science (Independent Study): This course is designed for academic students who enrolled in college level courses but not able to schedule regular agricultural classes. Subject areas to be covered are plant and animal science. Leadership skills and salesmanship skills are stressed. The student may develop and maintain records in a supervised agriculture project. In addition, a student may receive one additional credit if 120 hours of Supervised Agriculture Experience (SAE) is substantiated. Students will be able to participate in FFA sponsored activities. Grades 9-12. (.25 to 1 cr)

611 SAE Course: While concurrently enrolled in an agriculture class, credit will be issued for satisfactory work in the student's Supervised Agriculture Experience. Grades 9-12. (1.0 cr)

PE / HEALTH / TRAFFIC SAFETY

500 Health/PE 7: This course provides an introductory overview of general health topics including relationships, abstinence, violence/injury prevention, and disease prevention. Additionally, the course will build on healthy behaviors used in physical education by emphasizing physical activity and nutritional concepts as well as avoiding risk behaviors such as tobacco, alcohol, and drug use. Completion of this course will prepare students for topics to be discussed in Health 9-10 and Health 11-12. The health course portion meets once a week and the PE course portion meets twice a week throughout the year. See 501 Physical Education 8 for a description of the PE course portion. (.5 cr)

501 Physical Education 8: Physical education is required of all students unless they are excused by a physician. Classes meet two times per week and run through the entire year. Physical education is a phase of education which is concerned with developing the total physical and mental well-being of the individual so that he or she may participate to the fullest capacity in work and play of school life and of the years which lie beyond. The program will introduce the student to a number of physical and sport skills which will facilitate his or her participation in play and make possible a frequent workout, resulting in improved physical fitness. Within the class there is an opportunity to develop skills and attitudes that may be utilized in physical activity long after one leaves school. A balanced program of individual and team sports is presented. (.5 cr)

502 Physical Education 9-12: Physical education is required of all students in grades 9-12. Classes meet twice per week and run through the entire year. The required physical education program will introduce the student to a number of physical and sport skills which will facilitate his or her participation in play and make possible a frequent workout, resulting in improved physical fitness. In the physical education class there is an opportunity to develop skills and attitudes that may be utilized in physical activity long after one leaves school. A balanced program of individual and team sports is presented. (0.25 or .5 cr)

503 Contract Physical Education: For those students who are unable to schedule physical education, primarily because of Career and Technology courses, the option to contract for their PE credit will be available. The contract will involve a choice of activities that must be

done for a minimum of three hours per week. To receive credit, the contract sheet must be filled out and signed by the student and his/her parent each week and turned in to the guidance office each Monday or the first school day of the week. Failure to do so will result in credit being denied. The course will be graded pass/fail. **Prerequisite: Inability to schedule PE due to academic courses. Permission of school counselor or principal.** (0.5 cr)

504 Strength Training: This course instructs students in the basic skills of strength training through the use of free weights, machines, and various muscular strength exercises. Other aspects of the course include cardiovascular endurance, conditioning techniques, pre and post workout stretching, nutrition, and current topics in the world of fitness. Students will be required to change into workout clothes prior to class. This class will take the place of **Physical Education 9-12**. Grades 9-12. (0.25 or .5 cr)

506 Health 9-10: This is a comprehensive course with a guiding approach to wellness education. This course helps students to understand wellness concepts through direct, simple explanations and high-interest content. The content will cover nutrition, weight control, nervous system, skeletal and muscular system, endocrine, circulatory, and respiratory system, and digestion. This course meets three days per week. (0.5 cr)

507 Driver's Education (classroom): This course includes the study of rules, regulations, and signs of the highway transportation system. The students will be given information on obtaining a learner's permit. They will learn the importance of vehicle maintenance and financial responsibility requirements. Students will be introduced to both physical and cognitive aspects of the driving task. This course meets two days per week for one semester. Grade 10. Note: The Driver's Education practicum course will be arranged according to a sign-up with the teacher. Times will vary dependent on summer hours and after school schedules. (0.25 cr)

508 Health 11-12: This is a comprehensive course emphasizing mental health, stress, mental disorders, tobacco, alcohol, and drugs. The approach helps students apply wellness knowledge in making intelligent decisions about their own health and encourages them to achieve and maintain a high level of physical, mental, and social wellness. Additionally, this course will continue with units covering communicable and non-communicable diseases and disorders. A unit covering human sexuality will include topics covering a range of family and social health issues. This course meets three days per week. (0.5 cr)

ELECTIVES

Elective credits may also be taken from any department course offerings above and beyond the required credits as well as from the following programs:

BUSINESS / COMPUTER TECHNOLOGY

124 Video Technology: This course is an introduction to digital video editing utilizing video software as tools to create an end product. The course focuses on the technology and practice of digital editing, from the conversion of analog video and digital capture, to final assembly. Techniques are presented for setting in/out points on source clips, constructing transitions, titling, creating alpha channels, masking, and other special effects. Students will be responsible for filming school events throughout the year, during and after school hours. Students must also be self-motivated and capable of working independently on projects. Grades 9-12. **Prerequisite: Basic computer skills and permission of the instructor.** (0.5 or 1.0 cr)

220 Business Law: This course will introduce students to the basics of the legal system and its impact on businesses of the twenty first century. Students will explore the structure of the legal system, and how the legal system will create a positive business practices. The course will explore consumer legal issues and rights. This course will help students analyze the constant changing nature of law, and the influence of law on businesses.

Technology 2.0: This course is part of the 7th grade general rotation. It is designed to instruct students in the use of Web 2.0 technologies. The course encompasses such web-platform applications as Google Docs, Prezi, and other on-line tools. Keyboarding skills will be strengthened with a focus on speed and accuracy. 7th grade. (.25 cr)

Microsoft Office Suite: This course is designed to instruct students in the overall use of Microsoft Office programs which will be used in other classes throughout the students' high school career and beyond. Instruction includes **Word, Excel, Access, PowerPoint, and Publisher**. The course will culminate with a project incorporating all Office programs. Semester (All 9th grade) (.5 cr)

810 Accounting I: This is an entry-level course designed to introduce students to basic accounting concepts and procedures useful for everyday life as well as for business applications. The course takes the student through the accounting cycle beginning with a service business and progressing to a merchandising business. Students will learn to analyze business transactions, record transactions into appropriate journals, post journals into a general ledger, create a work sheet, determine profit and loss, prepare financial statements, and close the fiscal period. The last part of the course utilizes computer applications involving the process that has been learned manually. The course also encompasses banking services such as checking and savings accounts and taxes, both business and personal. Several business simulations are utilized enabling students to experience a realistic application of the concepts learned. Grades 10-12. (1.0 cr)
Note: Accounting I is an elective in Grade 10 and must be taken with another math course.

811 Accounting II: The second-year course in accounting continues to develop the student's abilities in financial record keeping and analysis of business transactions. Practice sets will be used that require the student to keep complete sets of books for various types of businesses. A computer accounting program is used to keep accounting records. Account control systems are employed for vouchers, petty cash, and inventory. Grades 11-12.
Prerequisite: Accounting I. Semester (0.5 cr)

814 B Word/Excel (2 Year Course – students may take each independently):

Microsoft Excel 2010 – 1 year course

Learn the essential features of Microsoft Excel and spreadsheets to create and manage large workbooks, lock and hide rows and columns, print large worksheets, create 3-D formulas and link workbooks together. Find out how to use functions to format text, work with styles and themes, add and delete watermarks, outline and consolidate data, create subtotals, sort and filter data. Table and chart creation will also be covered.

Learn more advanced features of Microsoft Excel and spreadsheets to create advanced charts, add graphical elements, create trendlines and insert sparklines. Find out the many features to help share and protect your spreadsheet, such as: commenting, tracking changes, adding passwords and protecting portions of worksheets. Discover how to work with templates and settings, create PivotTables and PivotCharts, and use logical, statistical, financial and date functions. Using lookup functions and creating data tables will also be covered. The class culminates with a portfolio project incorporating various components of Microsoft Office. (1.0 cr)

Microsoft Word 2010 – 1 year course

Learn the essential features of Microsoft Word to create and apply formatting using styles, work with outlines and create and format document sections. Find out how to work with columns, insert section and column breaks, create and format tables, insert and edit diagrams and use the drawing tools. Discover how to insert pull quotes, drop caps, hyperlinks and WordArt.

Learn more of the essential features of Microsoft Word to work with and save templates, create and insert building blocks, edit document properties, insert content from other applications, change the background of your document and apply a watermark. Find out how to work with themes, create and protect forms, work with master documents, create a table of contents and add captions. Discover how to create an index, insert citations, use footnotes, create bookmarks and review documents and track changes. A portfolio project is required for this course. (1.0 cr.)

823 Personal Finance: Students will be engaged with a totally visual computer simulation to learn and practice all the key personal financial skills they will need to succeed in life. Students will be challenged to understand the various aspects about bank accounts, credit and debit cards, bills, credit scores, taxes, insurance, investing and more. The goal of this course

is for students to learn how to develop financial responsibility, prepare for their future and become successful young adults. Grades 11-12. (0.5 cr)

822 Photoshop: Photoshop is an image-editing program that allows students to create and modify digital images. In addition to being an application popular with graphics professionals, it is practical for anyone who wants to enhance existing images or create their own original images. Students will be involved in many projects showcasing the powerful tools available in Photoshop. Grades 10-12. (0.5 cr)

SCHOOL-TO-WORK

880 School-to-Work Experience: Seniors who have a specific vocation/career goal may elect to spend one half of the school day at a work experience site. The student must find the site and submit a list of goals which he/she hopes to accomplish at the work site. The student must complete the Training Agreement and submit all the required signatures before the work experience can be scheduled. A satisfactory evaluation must be received each quarter from the site supervisor in order for the student to remain on the job. Grade 12. **Prerequisite: Overall grade point average 2.0 and permission of school counselor/principal. Pass/Fail (No Credit)**

890 Elementary School Aide: Students in Grades 11 and 12 may elect to work with an elementary school teacher. This **requires** that a student be enrolled in a Child Development course or have completed the course. The purpose of the course is to prepare students to work with children either in a social service setting or in a school/preschool environment. Students must have a career goal which entails working with children in a variety of settings. Students who enroll in the course will be matched with a teacher-mentor in the elementary school. **Prerequisite: Dual enrollment in Child Development I or II. Pass/Fail. (No Credit)**

891 High School Aide: Students in Grades 11 and 12 are permitted to apply to work with a teacher/staff member in the high school or district office. However, students and teachers will be asked to complete a contract which lists the responsibilities of the student. No high school aide will have access to any student records, including tests, scores, or graded material. The contract will be submitted to the high school office and remain on file. A teacher/staff member may have only one aide per year. **Prerequisite: Permission of instructor. Pass/Fail (No Credit)**

DUAL ENROLLMENT: Juniata College, Mt. Aloysius College and Penn Highlands Community College

The Dual Enrollment program is offered to high school students that meet the GPA requirements and want to earn college credit while in high school. Dual enrollment courses are offered at Juniata Valley High School through Mt. Aloysius and Penn Highlands Community College and on campus at Juniata College.

(Information for Dual Enrollment is available in the Guidance Office.)

Note: All college courses are weighted for credit.

HUNTINGDON COUNTY CAREER & TECHNOLOGY CENTER

The Huntingdon County Career and Technology Center offers 18 programs organized into five career academics. A student will apply to a career academy and declare a major. Upon acceptance into a career academy and verification of your major, a student may have the opportunity to meet with HCCTC staff and also declare a minor. All students will receive instruction in leadership, career planning, entrepreneurship, and computer skills. All programs qualify for 3.0 credits.

902 ACADEMY OF AUTOMOTIVE AND MANUFACTURING TECHNOLOGY

902-01 Automotive Body Repair: Body frame construction/welding, metal/plastic/fiberglass repair, frame/unibody repair, mechanical component repair.

902-02 Automotive Mechanics: Basic engine repair, front-end alignment, lubricating/brake/suspension/exhaust systems, cooling/fuel/ignition/electrical systems and drive train.

902-03 Machining: Basic machine shop technology, drill press/CNC/lathe/milling machine operation, blueprint reading and use of precision equipment.

902-04 Welding: Cutting and bending, brazing, arc/gas welding, wire feed/shielded arc welding.

906 ACADEMY OF COMPUTER TECHNOLOGY

906-01 Construction Trades: Basic surveying, site preparation, framing of wood structures, roofing, finishing/trim, form-building, finishing concrete and basic masonry.

906-02 Electrical Occupations: AC/DC circuits, single phase/three phase, low voltage wiring, new wiring, rewiring existing structure, programmable logic controllers and residential/commercial wiring.

906-03 HVAC/Refrigeration: Types of air conditioning units/heat pumps, refrigerants, brazing/soldering/welding, wiring/piping, controls/circuitry, troubleshooting/repair.

906-04 Plumbing/Heating: Metal/plastic pipe, copper tubing, brazing/soldering, oil burners, hot air/hydronic systems, fixture/appliance installation, system testing/repair.

908 ACADEMY OF COMPUTER TECHNOLOGY

908-01 Computer Servicing Technology: PC troubleshooting/interfaces/peripherals, networking, digital electronics, computer operating systems and basic electronics.

908-02 Electronics Technology: Solid state devices, analog components, digital circuits, sensing/control devices, soldering and introduction to fiber optics.

918 HEALTH AND HUMAN SERVICES

918-01 Cosmetology: Shampooing/styling/coloring, scalp/hair treatment, makeup selection/application, skin hygiene, perms/cutting and salon/product organization.

918-02 Culinary Arts: Menu planning/design, hot/cold food preparation, recipes, fresh food selection, serving/presentation techniques, pastry/cake decoration, supplies/equipment.

918-03 Health Occupations: Medical terminology, anatomy/physiology, nurse assistant/medical assistant/nursing skills, vital signs and medical/surgical/laboratory/medical procedures.

920 ACADEMY OF AGRICULTURAL TECHNOLOGY

920-01 Floral Design: Flower shop/garden center management, floral design and customer service.

920-02 Greenhouse Management: Greenhouse structures/equipment, principles of plant growth, greenhouse plant production, plant propagation and SOE record keeping.

920-03 Landscape Design: Landscape maintenance and design, exterior/interior plantscaping horticultural soils and turf grass production.

920-04 Small Engine Maintenance and Repair: Service /repairing small gas engines, constructing/repairing farm equipment, maintaining shop tools.

920-05 Animal Science: This course is the study of small and large animals, body systems, breeding, and health care. This course also provides practice in office procedures for work in a veterinary clinic.