

## Hanover Area Jr/Sr High School Course

### Descriptions

#### Reading & Language Arts

##### 0731-33 Developmental Reading 7

This course is based upon the PA Academic Standards for Reading, Writing, Speaking, & Listening. Focus of this course is for students to obtain required state proficiency levels and to develop and refine content area reading strategies for use across the curriculum. The core-reading program provides balanced instruction in both curricular and recreational reading.

##### 0824-26 Developmental Reading 8

This course is an extension of Developmental Reading 7 with emphasis on content area literacy skills.

##### 0981 Reading- Grades 7 & 8

983.	0983 Reading- Grades 9 & 10
984.	0984 Reading- Grades 11 & 12

These courses are designed for the student who may have identified reading deficiencies. Emphasis will be placed on specific reading techniques, which will best suit the individual. The curriculum includes word recognition, vocabulary development, and comprehension skills. Students will use materials suited to their independent and instructional levels.

##### 0720 English 7

This course is designed to help students develop a better understanding and command of the English language by placing an intense focus on the development of grammar skills, mechanics, and usage. Students will be introduced to oral presentations and will also write a research paper written in MLA format. This course addresses the Pennsylvania Academic Standards for Reading, Writing, Speaking, and Listening.

##### 0720 Career Planning- Grade 7

Career Planning is designed to provide a differentiated approach to helping students with self-discovery, career exploration, job selection and post graduation decision-making. This course aims to satisfy the Chapter 339 Career Initiative for 7<sup>th</sup> grade.

##### 0820 English 8

English 8 is a course based upon the Pennsylvania Academic Standards for Reading, Writing, Speaking, & Listening, which builds on the understanding and command of the English language by reinforcing grammar skills, mechanics and usage. This course emphasizes grammar with an intense focus on the writing process. It also includes the study of more advanced literary works including selected novels, dramas, poems, and short stories.

1007-1008  
1009-1010  
1011-1012

These courses are designed for students who are experiencing difficulty in language skills at each grade level. Students will develop a better understanding and command of the English language through instruction in the basics of language, composition, and literature. The course content is adapted to meet the individual needs of the student.

English- Grades 7 & 8 English- Grades 9 & 10 English- Grades 11 & 12

0110 Honors English 9\*

Prerequisite: Recommendation of previous English teacher, a grade of 92 or above, Advanced Scores on Pennsylvania State Tests.

This course designed for the academically talented, and emphasizes composition and critical reading skills. Students improve their language abilities through the writing process in conjunction with analysis and response to appropriate literary selections. Completion of a research paper written in MLA format is a requirement. This course addresses the PA Core Standards.

0120 English 9

This course is required of all 9th grade students not enrolled in Honors English 9. Grammar, mechanics, usage, and composition skills are reinforced through various writing assignments. Literature study in the various genres and the completion of a research paper written in MLA format is a requirement. This course addresses the PA Core Standards.

0210 American Literature -Grade 10

This course is designed for college prep sophomore students and those who are language and literature oriented. A study of American literature from earliest times to the present, is the focus of this course. Students will continue to refine writing (including grammar and mechanics) abilities through response and analysis of the literature studied in this course. Essays written in MLA format are required. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

0215 Honors American Literature-Grade 10\*

Prerequisite: Recommendation of previous English teacher, a grade of 92 or above, Advanced Scores on Pennsylvania State Tests.

In this course of study of American authors, students will continue to refine reading and writing (including grammar and mechanics) abilities through writing assignments which involve analysis, critique and expression of the literature studied in this course. Essays written in MLA format are required. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

0220 English 10

This course reinforces fundamental grammar, usage, and the study of mechanics while providing additional focus on the various literary genres. Students in this course are required to complete writing assignments and build presentation/communication skills. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

\* Students must meet specific prerequisites to enroll in this course.

#### 0321 SAT Prep: Math and Reading- Grade 10

This SAT Prep course is a four-day a week yearlong class designed to help students prepare for the verbal and math portions of the Scholastic Aptitude Test (SAT) and the American College Test (ACT). Students will be encouraged to work interactively with released ACT/SAT tests and ACT/SAT practice questions as well as completing assignments to improve vocabulary and math skills. Much of the class time will be devoted to identifying and analyzing students' weaknesses in order to work toward improving the students' overall test scores. The goal is for the students to become more time efficient test takers and improve scores on the ACT/SAT. The course is also designed to prepare students for college success and beyond as they focus on the college application process and the task of choosing a college to fit their needs.

#### 0315 Honors English Literature-Grade 11\*

Prerequisite: Recommendation of previous English teacher, a grade of 92 or above, Advanced Scores on Pennsylvania State Tests.

This course presents English literature in a chronological and historical context from the Anglo-Saxon period to the present. It enables students to gain an understanding of both the historical background of the times and the great literary works, which originated from them. It encourages students to read critically and respond logically so that they become active readers, thus gaining a greater appreciation and understanding of English literature. Students will continue to refine writing (including grammar and mechanics) abilities through response and analysis of the literature studied in this course. A research paper written in MLA format is required for the completion of this course. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

#### 0410 English Literature-Grade 11

This course presents a complete chronological study of the literature of Great Britain. Literary concepts, writers' techniques, and appropriate response to literature is the focus of this course. Students will continue to refine writing (including grammar and mechanics) abilities through response and analysis of the literature studied in this course. A research paper written in MLA format is required for the completion of this course. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

#### 0320 English 11

Students in this course are expected to master skills in grammar, usage, and mechanics while improving on verbal and written communication skills. One quarter of the year is devoted to the study of English Literature and contemporary authors. Students will learn the elements of various genres. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

#### 0324 College Language Skills-Grade 11

This course focuses on written language and effective speech communication necessary for a successful college experience. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

#### 0420 English 12

This basic course consists of two quarters of basic grammar and usage study, and two quarters of literature from the earliest voices to modern times. Students learn the elements of various genres and are required to prepare speeches periodically throughout the course. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

\* Students must meet specific prerequisites to enroll in this course.

#### 0424 Creative Writing-Grade 12

Students in this course will write and edit a number of works that lend themselves to developing skills and creativity. Students write poetry, fiction, personal essays, and other forms appropriate to their level of growth. This course addresses the PA Academic Standards for Reading, Writing, Speaking, & Listening.

#### 0415 AP World Literature-Grade 12\*

Prerequisite: Recommendation of previous English teacher, a grade of 92 or above, and Advanced Scores on Grade 11 Keystone Exams.

This course offers students the opportunity to explore in depth literature with emphasis on the development of composition skills. Students learn critical skills in reading and writing, along with various methods of engaging literary texts imaginatively. Students in this course are required to take the Advanced Placement Test. Various genres are represented in this course and students learn techniques and ideas of famous authors. Students will continue to refine writing (including grammar and mechanics) abilities through response and analysis of the literature studied in this course. This course addresses the PA Common Core Standards for Reading, Writing, Speaking, and Listening.

#### 0421 World Literature-Grade 12

Prerequisite: Students must attain an English grade of 85 or above.

This course covers selections from the literature of major civilizations of the Eastern and Western worlds. Emphasis in the course is on the development of critical reading and thinking skills, composition fluency and knowledge of the techniques and ideas of diverse literatures and people. Students will continue to refine writing (including grammar and mechanics) abilities through response and analysis of the literature studied in this course. This course addresses the PA Common Core Standards for Reading, Writing, Speaking, and Listening.

#### 0422 College Placement English-Grade 12\*

Prerequisite: English 9, American Literature or English 10, English Literature or English 11 with grades of 85 or higher in each course and teacher recommendation.

\* Please note that space is limited for this course. This course is designed to prepare students who may need a refresher on a variety of English skills and are enrolled in non-math or science related majors. It is offered through collaboration with Luzerne County Community College. The first half of the course is based primarily on the fundamental concepts of writing. This course emphasizes paragraph development techniques, sentence structure, mechanics, and usage of language. Students prepare paragraphs leading to complete essays in terms of descriptive, narrative, and expository writing. Classwork may include conferencing, collaborative and individual writing, revising and editing of papers, reading and discussion. Students must successfully complete the course and pass a mandatory writing test given at the end of the semester successfully. The first section of this course prepares the student for ENG 101 Composition I, and will apply towards high school graduation.

The English 101 component (second half of the course) will focus on the principles of rhetoric, grammar and usage, and vocabulary development. Extensive use of selected materials are stressed as fundamentals in the writing of themes, as well as extended papers. Students will be required to take a writing competency exam as part of this course.

\* Students must meet specific prerequisites to enroll in this course.

#### 0325 Journalism I - Grades 11-12

This hands-on course is an introduction to Desktop Publishing that will present methods of layout, construction, and verbal accuracy of booklets (The Hawk's Eye). Creative design will incorporate development of flyers, brochures, and cards. This course will involve using an Apple desktop computer, laser printer, and digital camera provided by the student. It will employ the reiteration of basic computer graphic techniques along with techniques incorporated in Apple's iWork Pages. This course will manipulate graphics and language to effectively communicate the message to the audience.

#### 0425 Journalism II – Grade 12

This hands-on course requires the prerequisite of either Desktop Publishing I or an editorial position on Yearbook. It will incorporate the construction of current school-based newsletters (Hawkeye Highlights) and assigned sports teams or clubs monthly updates. The course will involve using an Apple Desktop Computer, printer, and digital camera provided by the student. It will employ advanced computer graphic techniques using Apple's iWork Pages and the Internet for accurate research, and it will reiterate and enhance editing skills by accepting responsibility for editing The Hawk's Eye.

#### 0985 Senior Project/Transition- Grades 12

This course is designed to perfect skills necessary for success across all content areas. Adaptation, organization, and directional skills are taught, as are techniques in note taking, memory enhancement, and long-term retention. The course offers an individual curriculum for senior high students in order to help with completion of senior project.

#### 0450 Yearbook- Grades 9–12

Yearbook is an elective course that offers a pass/fail quarterly grade and is open to students in grades 9-12. It meets a minimum of one period per week during the school year and requires a commitment to work beyond the normal school day. Students learn all aspects of the production of yearbook including journalism, photography, layout and design, advertising, sales, and marketing.

### Foreign Language

#### 1123 Spanish I- Grade 9-12

This course introduces basic phrases, vocabulary, and grammatical structures of the Spanish Language. Students practice basic listening, speaking, reading and writing skills in Spanish as well as learn about various cultural topics. The goal for the end of the course is for students to be at the Novice Mid/High proficiency level in all areas according to the American Council on the Teaching of Foreign Language.

#### 1223 Spanish II- Grade 10-12

Prerequisite: 80 average in Spanish I or teacher recommendation

In this course, students continue to build and expand vocabulary, knowledge of basic grammatical structures, verb tenses, and fluency. Students are expected to practice listening, speaking, reading, and writing skills daily, along with learning about various cultural topics. Course will be given in Spanish and students are expected to speak in Spanish in class. Goal for the end of the course is for students to be at the Novice High/Intermediate Low proficiency level in all areas according to the American Council on the Teaching of Foreign Language.

\* Students must meet specific prerequisites to enroll in this course.

### 1323 Spanish III- Grade 9-12

Prerequisite: 88 average Spanish II or teacher recommendation

This course is designed to expand upon students' knowledge achieved in levels I and II. Course will be given entirely in Spanish and students are expected to speak only Spanish and students are expected to speak only Spanish. This course's purpose is to prepare students for communicative language courses in college as well as conversing with native Spanish-speakers. The authentic material studied will include complex grammar and develop vocabulary and cultural knowledge. The focus of the course will be aimed at cultivating and strengthening reading, writing, and speaking and listening skills in Spanish. The goal for the end of the course is for students to be at the Intermediate Low/Mid proficiency level in all areas according to the American Council on the Teaching of Foreign Language.

### 1423 Spanish IV- Grades 9-12

Prerequisite: 88 average Spanish III or teacher recommendation

Spanish IV's purpose is to improve previously learned skills and improve students' fluency in reading, writing, speaking and listening skills. This course's purpose is to prepare students for communicative language courses in college as well as conversing with native Spanish-speakers. Course will be given entirely in Spanish and students are expected to speak only Spanish. The authentic material studied will include advanced grammar and develop vocabulary and cultural knowledge. The goal for the end of the course is for students to be able at the Intermediate Mid/High proficiency level in all areas according to the American Council on the Teaching of Foreign Language.

## Social Studies

### 2730 World Cultures I & Geography- Grade 7

This course is designed for students to understand the relationships between World Cultures of the past and today. It will examine the Beginnings of Human Society, Ancient Egypt, Greece, and Rome. Special emphasis will be placed on the foundations of geography as students focus on the basic tools and concepts of geography. A project and presentation is required for this course.

### 2830 World Cultures II-Grade 8

This course serves as a continuation of World Cultures I. It is designed for students to learn more of the interrelations between the world cultures of yesterday and today, and the intercultural connections of societies worldwide. This course examines the Byzantine Empire, Ancient American Cultures, the Renaissance and Reformation, European exploration and expansion, revolutions and empires and our modern world today. A project and presentation are required for this course.

### 2132 American Cultures I- Grade 9

American Culture I is the study of important people, events, and documents in the history of the American Nation. The course begins with an overview of the society, culture, and influence of the Native Americans. Major topic areas include Colonial America, the American Revolution, the Formation of our Government, the War of 1812, Jacksonian Democracy, Westward Expansion, and the Civil War. Students are led step by step to an awareness of the growth of the United States from its inception to the 1860's.

\* Students must meet specific prerequisites to enroll in this course.

### 2232 American Cultures II- Grade 10

Prerequisite: American Cultures I

The course serves as a continuation to American Culture I. Beginning with the Reconstruction Era, it includes the study of important people, events, and documents found under such major topic areas as the Industrial Revolution and the Cold War. American Culture II focuses on changing American domestic and foreign policies from the 1860's to the present.

### 2330 Government & Economics - Grade 11

This course is designed to give students an in-depth look at politics and government and to increase their knowledge of their present and future roles as active citizens within American Society. Students will examine the history and foundation of our federal government and explore the differences between federal, state, and local government levels. The foundations of economics and the government's role in the economy will also be examined. Incorporated with the lessons are simulations and decision-making activities based on current happenings throughout our nation.

### 2332 American Modern History- Grade 12

This course is designed to give students an in-depth understanding of historical events that have shaped American society since World War II. The course will examine the Cold War, the Korean and Vietnam Wars and other historically significant events and their effects on American government and society. It will give students an understanding of America's political system and international relations with European, and Mid-Eastern and Far-Eastern nations from World War II to present. Research projects and presentations are requirements for this course.

### 2422 Psychology- Grades 11 & 12

This course is designed with several broad purposes in mind. First, it attempts to resolve the every day problems that exist in human development. Second, it considers the areas involved in the relationships man has with others; and third, it explains and illustrates the significance of psychological findings that pertain to proper mental health and the individual's own sense of self accomplishment. Students will study major fields of psychology and psychologists.

### 2425 Criminal and Civil Law- Grade 12

The purpose of this course is to provide practical information and problem-solving opportunities that will help students develop the knowledge and skills necessary to survive in our law-saturated society. This course was developed by the National Institute for Citizen Education in the Law, Georgetown University.

### 2430 Sociology- Grade 11 & 12

Sociology is the study of man and his activities in the social group. The course examines social structure, social inequality, social institutions, and the changing social world. The course investigates the role of the individual in society. Topics such as deviance, personality development, and the aging process are examined. The course features a multi-media component.

### 2435 AP U.S. Government and Politics- Grade 12\*

Prerequisite: Teacher recommendation and a 94 average in Social Studies. This course will present students with an analytical perspective on American government and politics. Students will be encouraged to use the knowledge they gain from course concepts as a base for discussion and analysis of political

\* Students must meet specific prerequisites to enroll in this course.

undertakings. This course will cover all of the concepts necessary to gain a full understanding of the workings of government from the framing of the Constitution to the evolution of the various groups and institutions that exist today including the influences of political beliefs and behaviors of individuals on public policy.

#### 2441 Contemporary World Affairs- Grade 11 & 12

This particular course is concerned with an in-depth study of events occurring in the political, social, and economic spheres. Special emphasis is placed upon the role of the United States and the changes/adjustments in our foreign policy. The course content is concerned mainly with everyday events. Considerable use is made of periodical literature, Internet, mass media and technology.

2980.	2980 Social Studies Grades 7 & 8
2981.	2981 Social Studies Grades 9 & 10
2982.	2982 Social Studies Grades 11 & 12

The Social Studies curriculum in the learning support program follows the regular education course outline. However, it adapts the curriculum according to the specific needs and learning levels of the student.

#### 0735 Internet Research-Grade 7

Students will develop an understanding of the terminology for online searching, conduct online searches, distinguish between factual and unsubstantiated information on the Internet, evaluate web sites, cite electronic sources using MLA style, and learn basic skills for using email, in the academic setting. PA Academic Standards for Technology, and Career Education and Work are addressed in this course.

### Mathematics

Note: Students are required to earn 1 math credit in grades 7 and/or 8 AND demonstrate proficiency on PSSA Mathematics. Students not obtaining 1 math credit in grades 7 and/or 8 and/or not demonstrating proficiency on PSSA Mathematics may need to successfully complete an approved math summer program and take a district approved assessment.

#### 3722 Mathematics 7

This course is based upon the PA Academic Standards for Mathematics and covers topics required to prepare students for demonstrating proficiency in Mathematics. Calculator use is introduced and students are encouraged to have a scientific calculator.

#### Math Skills 7 – Grade 7

The 7<sup>th</sup> grade Math Skills 7 course is designed to prepare students for success in Algebra I and the current requirements of the PSSA exam. This course will introduce the fundamental Algebra skills involving variables, expressions, and equations.

#### 3822 Honors Mathematics 7\*

Prerequisite: Minimum math average in Grade 6 of 92, recommendation of 6<sup>th</sup> grade math teacher, and advanced math scores on Pennsylvania State Tests.

\* Students must meet specific prerequisites to enroll in this course.

This course is offered to students in grade 7 who demonstrate superior math skills. The course pace is brisk so students must be capable of grasping math concepts rapidly. Calculator use is introduced and students are encouraged to have a scientific calculator.

#### 3121 Honors Algebra I - Grade 8\*

Prerequisite: Minimum Math 7 average of 92, Math 7 teacher recommendation, and advanced math scores on Pennsylvania State Tests.

This course is intended for the student who has the ability to grasp abstract mathematical concepts rapidly.

#### Math Skills 8 – Grade 8

The 8<sup>th</sup> grade Math Skills 8 course is a continuation of a two-year sequence that will reinforce key topics of pre-algebra, promote mastery of the essential concepts of beginning Algebra and prepare students for the rigor of an Algebra I or Concepts of Algebra I course.

#### 3825 Pre-Algebra- Grade 8

This course continues and extends the material covered in Mathematics 7 or Honors Mathematics 7. Emphasis is placed on topics necessary to prepare students for proficiency in math.

#### 3124 Algebra I- Grade 9

This course is offered for those students who did not have Honors Algebra I in 8<sup>th</sup> grade, but are on track to take the Algebra Keystone Exam as a freshman. This course is based upon the PA Core State Standards in preparation of the Algebra Keystone. It teaches students the structure and properties of the real number system and the significance of those properties in solving equations and inequalities.

#### 3123 Concepts of Algebra – Grade 9

This course is a continuation of the arithmetic principles and their uses in Algebra. There is a continued emphasis on strengthening the basic skills required to succeed in upper level math courses. In addition, this course is geared to provide help in understanding math concepts that have not yet been mastered. After completion of this course, students will continue on into General Algebra 1.

#### General Algebra 1 – Grade 10

Prerequisite: This course is recommended for sophomores.

This course is designed to help students continue to build off of the skills learned in Concepts of Algebra. It is based upon the PA Core State Standards in preparation for the Algebra Keystone Exam. It introduces students to the structure and properties of the real number system and the significance of those properties in solving equations and inequalities.

#### 3224 Honors Algebra II – Grade 9

Prerequisite: Minimum Honors Algebra I average of 92, recommendation of Honors Algebra I teacher, advanced math scores on Pennsylvania State Tests.

This course is intended for students who have the ability to grasp abstract mathematical concepts rapidly. Scientific calculators required.

\* Students must meet specific prerequisites to enroll in this course.

### 3223 Algebra II- Grade 10

Prerequisite: Minimum Algebra I average of 80, proficient or advanced math scores in Pennsylvania State Tests.

This course is a continuation of Algebra I. Students selecting this course need average or above average Math skills. Scientific calculators required.

### 3224 Consumer Math

Pre-requisite: This course is recommended to juniors.

This course is designed to fill the needs of students entering society. The course stresses the applications of mathematics that are a part of everyday living. Topics include jobs, computing pay, automobile expenses, insurance, taxes, budget, commissions, deductions, wages, salary, banking, housing, remodeling, recreational expenses, credit cards, checking and savings accounts, transportation costs, housing costs, and household budgets.

### 3231 Honors Geometry-Grade 10\*

Prerequisite: Minimum Algebra II average of 92, recommendation of Honors Algebra II teacher, advanced math scores in Pennsylvania State Tests.

Geometry is the study of mathematics related to the properties, measurements, and relationships of points, lines, angles, polygons, surfaces, and solids; as well as, studying deductive reasoning and logic. Students in the honors course must be capable of grasping abstract mathematical concepts rapidly while constantly referring to previously learned Algebra skills. This rigorous course is designed to prepare students for college. Scientific calculators required.

### 3232 Geometry- Grade 10, 11, 12

Prerequisite: Minimum Algebra II average of 80, recommendation of Algebra II teacher, proficient or advanced math scores on Pennsylvania State Tests.

Geometry is the study of mathematics related to the properties, measurements, and relationships of points, lines, angles, polygons, surfaces, and solids; as well as, studying deductive reasoning and logic. Students selecting this course should have average or above average math skills. Scientific calculators required.

### 3331 Honors Algebra III & Trigonometry - Grade 11

Prerequisite: Minimum average in Geometry of 92, recommendation of Honors Geometry teacher, advanced math scores on the Pennsylvania State Tests.

This course is intended for students who possess the ability to grasp abstract mathematical concepts. Graphing calculators are required.

### 3332 Algebra III & Trigonometry- Grade 11-12

Prerequisite: Minimum average of 80 in both Algebra II and Geometry, proficient or advanced math scores on Pennsylvania State Tests.

This course is intended for students whose math skills are average or above average. Scientific calculators required.

### 3333 Math 12

This course is based upon the PA Academic Standards for Mathematics and covers topics required for

\* Students must meet specific prerequisites to enroll in this course.

students who have not reached proficiency on the Keystone Mathematics Assessment in Grade 10 or 11. This course is also required for students who are not in College Prep programs of study.

#### 3334 College Placement Math - Grade: 12

Prerequisites: Algebra 1, Algebra 2, Geometry with a minimum grade of 85 and teacher recommendation.

\* Please note that space is limited for this course. This course is designed to prepare students for college level math entry with a non-math or science-related major, who may need a refresher on a variety of math skills. It is offered through collaboration with Luzerne County Community College. The first half of the course is based primarily on basic computational skills without a calculator. Topics covered include: Whole Numbers; Multiplying and Dividing Fractions; Adding and Subtracting Fractions; Decimals; Ratio and Proportion; Percent; and Measurement. Successful completion of the first semester allows the student to move on to the second semester (Math 101), where 3 college credits can be earned. The second half of the course is intended to meet minimum college requirements in mathematics. Topics studied include: number theory, logic, consumer math, geometry, graph theory, probability and statistics.

As this is a college-level course, college-level expectations and guidelines apply. (Students may also incur some costs, determined in collaboration with LCCC, which will be kept as minimal as possible.)

#### 3335 College Statistics- Grade 12

Prerequisite: Minimum average of 92 in Algebra I, Algebra II and Geometry, recommendation of previous year math teacher, proficient or advanced math scores on Pennsylvania State Tests.

This course is designed to meet one of the basic needs of the emerging problems of mathematics, namely the introduction of probability and statistical inference. The content of this course involves in a logical order, the study of elementary theory and permutations and combinations, and the concepts of sample spaces repeated trials in probability. This is followed by an application of all the theory of hypothesis testing since this is considered the best way to introduce students to the study of statistical inference. A course in probability and statistics will provide an interesting, challenging, and rewarding study for students.

#### 3413 Calculus- Grade 12

Prerequisite: Algebra III & Trigonometry or Honors Algebra III & Trigonometry, proficient or advanced math scores on Pennsylvania State Tests.

This course is intended for students whose math skills are above average. The connection between mathematics and other disciplines will be examined in this course. Graphing calculators required.

#### 3423 Advanced Placement Calculus- Grade 12\*

Prerequisite: Minimum Honors Algebra III & Trigonometry average of 92, recommendation of Honors Algebra III & Trigonometry teacher, and advanced math scores on Pennsylvania State Tests.

This course is intended for students with superior math skills and the ability to grasp abstract mathematical concepts. Students in this course must demonstrate exceptional interest and aptitude in mathematics. Students completing this course in good standing may take the Advanced Placement Test in Calculus. Graphing calculators required.

### Computers

#### 3140 Intro to Computers - Grade 9

\* Students must meet specific prerequisites to enroll in this course.

**Required by all 9<sup>th</sup> grade students.** This hands on course will provide students with fundamental skills in the use of computer hardware and software applications. Hands-on lessons will be completed in word processing, spreadsheet, and presentation software applications. Additional topics on computer hardware, networking, Internet, and beginner programming languages will also be covered. In accordance with the school-wide 339 plan, career exploration and personal finance topics will be integrated throughout. Students will develop their skills in the latest technology and current office software to be competent in our digital society

#### 6224 Personal Finance

This course is designed to provide students with fundamental knowledge of real life finances and money management to be financially responsible citizens. Students will learn how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. These financial literacy skills will enable students to become informed consumers capable of analyzing and evaluating their personal financial decisions.

#### 3953 Web Design I and II

This course provides a basic to intermediate level of web design. Students will design, build and maintain sites they have built. Students will gain knowledge in principles and practices of the Internet. Students will then advance in using CSS and Dreamweaver with site building and management. Fireworks, Flash, Photoshop, and In Design will be introduced throughout the course with various hands on assignments and teacher instructor aide enhance their competencies

Grade levels: 11 – 12

#### Web Design (2<sup>nd</sup> year)

This course will allow students to build their level of intermediate knowledge of Adobe Software. Students will gain knowledge in higher levels of Digital Photography through both Photoshop and Fireworks working with developing various filters. They will also coordinate implement their assignments in In Design. Students will begin to understand and develop applications for Android and iPhone devices.

#### 6222 Keyboarding – Grade 10-12

This course will help students develop strong keyboarding skills, gain an understanding of computers and technology, and provide hands-on coursework in the practical application of commonly used software. Emphasis is placed on hands-on activities in word processing, spreadsheets, database, and presentation software. This course will introduce 21st century skills that will prepare students to be successful and competitive in the global marketplace.

#### 6425 Career and Employability Skills- Grade 12

This course is designed to educate students with an understanding of the career acquisition process. Students will receive guidance in making a successful transition from high school to the workforce or to a post secondary educational facility. Personal interests, skills, career awareness and preparation will be a

\* Students must meet specific prerequisites to enroll in this course.

focal point of the course. Career clusters and the requirements for success will be demonstrated through various exercises and assignments throughout the course.

3007-3008 Mathematics- Grades 7 & 8

3009-3010 Mathematics- Grades 9 & 10

3011-3012 Mathematics- Grades 11 & 12

These courses, designed for students who may have identified mathematic deficiencies, provide a consumer and career approach to Mathematics. Students will use materials suited to their independent and instructional levels. PA Academic Standards for Mathematics are covered in these courses.

## Science

4720 Science 7

This course based upon the PA Academic Standards for Science, integrates the various branches of science and encompasses a series of modules including freshwater, wetlands, weather and climate, astronomy, motion, forces, and energy.

4830 Science 8

This course based upon the PA Academic Standards for Science, integrates the various branches of science and encompasses a series of modules including earthquakes, volcanoes, plate tectonics, rocks, minerals, weathering, erosion, soil formation, fossils, cell reproduction, and ecosystem energy.

4227 Biology I - Grade 9

This challenging course will investigate the diversity and chemical structure of life, genetics, evolution, technology, and important ecological concepts. It will emphasize college study, lab work, notebook, and homework skills.

4226 Biology 1B- Grade 10

This course will investigate the diversity and structure of life, genetics, evolution, technology, and important ecological concepts. It will emphasize college study, lab work, notebook, and homework skills. Upon completion of the previously mentioned topics, students will prepare for the Biology Keystone Exam.

4228 Honors Biology I- Grade 9\*

Prerequisite: Minimum 92 average in Science 7 & 8, Advanced scores on PSSA Science Grade 8, and permission from instructor.

This rigorous course will follow the same course description as Biology I with more independent study requirements.

4327 General Science - Grade 11

This course brings together physics, chemistry, earth science, space science, environmental science, and mathematics. Emphasis is placed on practical applications of basic scientific principles, development of scientific literacy, and an appreciation of the natural world.

4325 Chemistry I - Grades 10 and 11

This course is designed to give basic knowledge of the fundamental concepts of Chemistry, the study of the

\* Students must meet specific prerequisites to enroll in this course.

atom and the nature of and changes that occur in matter. Concepts are developed through lectures and experimentation.

#### 4326 Honors Chemistry I- Grade 10\*

Prerequisite: Minimum 92 average in both Algebra II and Biology I, Proficient or Advanced Scores on Pennsylvania State Tests.

This course is designed for the advanced student to give basic knowledge of the fundamental concepts of Chemistry. The discovery-based course includes concepts that are developed through mathematical computations via cooperative learning and experimentation.

#### 4323 Honors Physics I- Grade 11\*

Prerequisite: Minimum 92 average in Biology I and Chemistry I

This rigorous course will follow the same course description as Physics I at a faster pace with more independent study requirements and mathematical examples.

#### 4425 Chemistry II- Grades 11 & 12

Prerequisite: Permission of Chemistry I and Algebra II instructors, minimum 90 average in Chemistry I

This course is a continuation of Chemistry I with emphasis on the mathematical relationships in chemical systems. Analytical laboratory techniques are introduced and utilized throughout the course. Chemistry II is recommended for those students who are planning careers in science or medical fields.

#### 4426 Organic Chemistry – Grade 12

Prerequisite: Chemistry II

The course will include an introduction to organic structures, reactions, and reaction mechanisms. This course is recommended for students interested in college majors in the medical field and pre-professional fields of study such as Pharmacy, Physician Assistant and Chemistry.

#### 4324 Physics I - Grades 11 & 12

This course is intended for students with strong mathematical problem solving skills who are seeking either information or studies in physics. It will cover the six basic units by which all natural phenomena can be measured. Lectures, demonstrations, and experiments will reinforce the concepts.

#### 4423 Biology II- Grades 11 & 12

Prerequisite: Biology I, Chemistry I, Physics I and permission of instructor.

This is a rigorous course intended for students who are interested in pursuing a career in a medical field or who want to learn more about this topic. After introductory chapters on biochemistry and advanced cell structure, the course focuses on human anatomy and physiology. The skeletal, nervous, cardiovascular, and endocrine systems will be emphasized. Clinical applications and strategies for lifetime wellness will be investigated. The class will emphasize the development of college study, lab, and writing skills.

#### 4424 Physics II- Grade 12

Prerequisite: Physics I, Chemistry I, or Biology I and permission of instructor.

This course is a continuation of Physics I for the student who plans to further his/her studies in science or mathematics. Topics covered in this course are electricity, atomic and nuclear physics, wave motion, and optics.

\* Students must meet specific prerequisites to enroll in this course.

### 4310 Earth and Space Science- Grade 12

Prerequisite: Minimum of 85 average in Science classes or permission of instructor.

This course teaches the principles and concepts of Astronomy, Geology, Oceanography and Meteorology. In addition to the four main branches of Earth Science, students will be given an understanding of Pennsylvania's local geology and weather. The course is designed around a college-level text in order to both challenge and prepare students for their future studies outside of high school.

\* Students must meet specific prerequisites to enroll in this course.

4980.	4980 Science-Grades 7 & 8
4981.	4981 Science-Grades 9 & 10
4982.	4982 Science- Grades 11 & 12

These Science courses are designed to address the different learning styles of each student and is adapted to meet the individual needs of the student. PA Academic Standards for Science & Technology are covered in these courses.

### Family & Consumer Science

#### 7820 Family and Consumer Sciences (1 Quarter) Grade 8

The eighth grade Family and Consumer Sciences course introduces the students to various areas inherent in a Family and Consumer Sciences curriculum. Emphasis is given in the areas of leadership development, food preparation, nutrition, resource management, consumerism, and child development.

#### 7150 Life Skills - Grades 9 - 10

Life Skills is a comprehensive foundation course designed to assist students in developing core knowledge and skills needed for successful life planning and management. Content includes human development; family and parenting education; resource management; housing and living environments; nutrition and foods; leadership development; and career preparation. A unique focus is on the management of families, work, and their interrelationships.

#### 7225 Independent Living- Grades 11-12

Independent Living is a comprehensive two-part course, which introduces students to the concepts and practices to successfully manage their personal finances, and prepares them to be self-sufficient inside the kitchen all aspects of planning and preparation.

Part 1: Students will analyze their personal financial decisions, evaluate the costs and benefits of their decisions, recognize their rights and responsibilities as consumers, and apply the knowledge learned to financial situations encountered later in life.

Part 2: Students will study food selection, meal preparation, and planning with regard to their lifestyle, focusing on convenient and quick food preparation suitable for a young adult.

### Technology Education

\* Students must meet specific prerequisites to enroll in this course.

#### 7829 Introduction to Technology Education- Grade 8

Three technologies are introduced in this quarter course; manufacturing, communications, and transportation. In manufacturing, the students will learn the application of hand tools, measuring, methods of assembling, and the importance of safety while working with wood and metal. In communications, the students will learn the fundamental techniques of mechanical drawing, pattern design and layout, and accurate means of measuring. An exploration of computer-aided design will be included. In transportation, the students will learn the basic fundamentals of power technology through experimentations and demonstrations with electricity. An exploration of power sources will be discussed. Rocket power as a source of transportation will be introduced.

#### 7142 Manufacturing I-Grade 9-10

Working with wood materials, the students will learn the historical, theoretical, and practical phases of each area. Bench work, layout and use of both hand and power tools will enable students to develop manipulative skills and shop safety. The emphasis of this program is to provide problem based learning activities and allow for the application of concepts of technology to develop technology literacy. PA Academic Standards for Technology, and Career Education and Work are addressed in this course.

### Fine Arts

#### 5732 Art 7

The seventh grade course is designed to teach basic skills and techniques which will serve as a foundation upon which to build future skills and generate interest in art. The course will include a variety of art experiences including drawing, painting, color and design, printmaking, sculpture and crafts. Art appreciation will be taught as an integral part of the program so as not to isolate concepts and ideas from the act of creation.

#### 5130 Principles of Art I- Grades 9 & 10

The course is designed for the student who wishes to become involved in basic art experience and acquire art skills beyond those learned in Art 7. In this course students experiment with various styles, materials, and methods. Drawing, painting, and a variety of other media are utilized in the creation of crafts. This course provides a foundation for the student who intends to pursue a career in art.

#### 5230 Advanced Art I- Grades 11 & 12

The class will use and build upon the basic elements and principles of art. Students will investigate drawing, painting, sculpting, and mixed media.

#### 5330 Advanced Art II- Grade 12

This course is an independent study of areas in art determined through conferencing with instructor and student. Projects and research are required for this course.

#### 8832 Music 8 - Grades 7 & 8

A requirement of all seventh and eighth grade students, this elemental approach will be used to study the stylistic characteristics of the Baroque, Classical, Romantic, and 20th Century.

\* Students must meet specific prerequisites to enroll in this course.

Contemporary/current/popular musical works will be incorporated and the student will be encouraged to compare popular genres with traditional forms to enhance life relevance.

#### 8833 Junior Band-Grade 7 & 8

7th & 8th grade students who play band instruments should sign up for this course. The Junior Band will rehearse after school (2:00 p.m.) one day a week throughout the school year. The students are also encouraged to attend weekly lessons either before school or on Mondays (following a rotating schedule). The Junior Band joins the Senior Band in several performances throughout the year.

#### 8932 Junior Chorus- Grades 7 & 8

The course will continue the elementary choral experience. The student will sing 2-3-4 part music. Understanding the unique timbre of the adolescent voice, the junior chorus will be given as many Junior Chorus performance opportunities as possible. All choruses should combine at appropriate times to promote departmental unity.

#### 8956 Senior Band- Grades 9-12

Instrumental students and Senior Band students meet throughout the school year to learn to play a variety of types and styles of music. Various performances are a component of this program and students are required to attend weekly lessons.

#### 8942 Senior Chorus - Grades 9-12

The Hanover Area Senior Chorus is performance-oriented and at times combine with Elementary/Junior Chorus and Stage Band for select performances. Open to students in grades 9-12, students will be exposed to S-A-T-B music of various styles. Students in grades 10-12 are encouraged to participate in P.M.E.A. festivals.