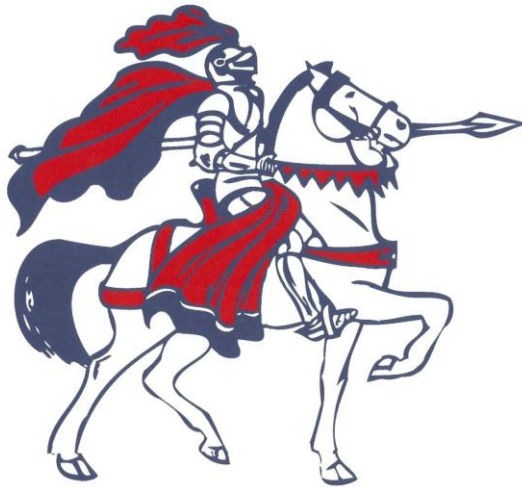


CARBONDALE AREA JR-SR HIGH SCHOOL

COURSE SELECTION GUIDE

Academic Year
2022-2023



This guide is a resource for students and parents to engage in educational and career planning.

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www.carbondalearea.org

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Dear Parents and Guardians,

Carbondale Area Jr./Sr. High School is committed to providing your child with the best education possible and that includes challenging every student to reach his or her full potential. Our goal is to ensure that your child will have a strong foundation for future success in whatever College or Career they choose to enter. We will accomplish this through our outstanding educational system where highly effective classroom teachers, using a rich and rigorous curriculum and differentiated instruction will help all students meet the PA academic standards.

This course selection guide provides course descriptions that will assist you and your child in selecting the proper courses to meet their needs and interests. We encourage you to take an active role in developing your child's educational plan as we strive to create high expectations and learning experiences for a successful academic career.

Respectfully,

A handwritten signature in black ink that reads "Lawrence A. Gabriel III". The signature is written in a cursive style with a prominent flourish at the end.

Lawrence A. Gabriel III
Acting Principal / Athletic Director
Carbondale Area Jr./Sr. High School

GUIDANCE DEPARTMENT CONTACT INFORMATION

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INTRODUCTION TO THE COURSE SELECTION PROCESS

This course selection guide is intended to assist students in grades 8 – 11 select high school courses for grades 9 – 12. School counselors, teachers, and the principal make placement and scheduling recommendations for incoming 7th, as well as 8th grade students, based on the students' academic and standardized test performance and learning needs. This course selection includes course descriptions for all courses offered in grades 7 – 12 in the Carbondale Area School District. Every attempt will be made to accommodate course requests when students meet all eligibility criteria. However, some courses, class periods, schedule options, or suggested class size limitations may not be available based upon scheduling conflicts, number of students, staffing limitations, and other considerations.

LEVEL RECOMMENDATION GUIDELINES

Advanced Placement

This level is for academically talented college preparatory students whose abilities, interests, and demonstrated levels of performance show they can/will meet the demands of difficult college work in high school. Advanced Placement classes assume students already have strong foundations in the specific subject area of the course and are seriously interested in preparing to take the subject area AP exam.

Honors

This level is for high achieving students who are capable of higher levels of thinking and demonstrate the ability to perform academically in a highly competent manner. This level requires the student to be responsible, mature, and have well-developed study skills which enable the student to pursue independent learning.

Academic

This level is for students who are preparing for post-secondary college and career opportunities. This level requires the student to be responsible, mature, and have well-developed study skills which enable the student to pursue their academic and career goals.

General

This level is for students who are preparing for post-secondary career and training opportunities. This level requires the student to be responsible, mature, and have well-developed study skills which enable the student to pursue appropriate career goals.

GRADUATION REQUIREMENTS

Successful completion of 23 or more credits is required for graduation. Students in grades 9-12 are required to enroll in a minimum of 27 credits over four years with at least 6 full credit courses and Physical Education each year; both Health and Physical Education are required in 12th grade. The minimum credit requirements for each subject area are listed below.

English	4.0 credits
Science	3.0 credits
Math	3.0 credits
Social Studies	3.0 credits
Arts/Humanities	2.0 credits
Physical Education	2.0 credits
Health	0.5 credits
Electives	5.5 credits
TOTAL	23 credits

Act 158 of 2018 (Act 158) provides alternatives to Pennsylvania’s statewide requirement of attaining proficiency on the three end-of-course Keystone Exams (Algebra I, Literature, and Biology) in order for a student to achieve statewide graduation requirements. This toolkit is designed to provide guidance as a result of the enactments of Act 158 and Act 6 of 2017 (Act 6), which established alternative pathways to meeting statewide graduation requirements for students who are Career and Technical Education (CTE) concentrators.

Effective with the graduating class of 2023¹, students have the option to demonstrate postsecondary preparedness through one of four additional pathways that more fully illustrate college, career, and community readiness. Keystone Exams will continue as the statewide assessment Pennsylvania uses to comply with accountability requirements set forth in the federal Every Student Succeeds Act (ESSA). Although students will no longer be required to achieve proficiency on the Keystone Exams in order to meet statewide graduation requirements, students must take the Keystone Exams for purposes of federal accountability. Failure to do so will affect a Local Education Agency (LEA) and school’s participation rate.

Detailed information will be provided to students/parents. You can find detailed information at www.pdesas.org

CLASS RANK/ GRADING SYSTEM/WEIGHTED GRADES

Class rank is cumulative, weighted, and is based upon all full credit courses taken in grades 9 – 12. Advanced Placement courses in Chemistry, English, Math, and American History, Advanced Biology, Physics and all Honors courses are weighted by a factor of +4. Rank is available after every marking period. All students except Foreign Exchange students are ranked. A student who transfers to Carbondale Area School District will be assigned a class rank after being enrolled for at least two (2) semesters. A student transferring as a senior will not be ranked. A student must be enrolled in the high school for four (4) full consecutive years (Grades 9 – 12) to be considered Valedictorian, Salutatorian, or Class Poet. In addition to meeting all other graduation requirements he/she must also complete two (2) years of a foreign language and complete three (3) Advanced Placement courses.

All full credit courses are given a number grade. Letter and grade point average conversions are listed below.

99-100	A+	3.9-4.0
95-98	A	3.5-3.8
93-94	A-	3.3-3.4
91-92	B+	3.1-3.2
87-90	B	2.7-3.0
85-86	B-	2.5-2.6
83-84	C+	2.3-2.4
77-82	C	1.7-2.2
75-76	C-	1.5-1.6
70-74	D	1.0-1.4
00-69	F	0

HONOR ROLL

Students who have attained an overall average of 93-100 in all major subjects are designated as having achieved Distinguished Academic Honors. Students who have attained an overall average of 87-92 in all major subject areas are designated as having achieved Second Honors. A failing grade or an incomplete grade in any subject disqualifies a student from the Honor Roll regardless of his/her average.

NATIONAL HONOR SOCIETY

Selection to the National Honor Society and National Junior Honor Society is based on scholarship, character, leadership and service. To be eligible for the membership consideration, a student must have a cumulative average of 90 or above for six consecutive quarters.

CAREER TECHNOLOGY CENTER

The Career Technology Center of Lackawanna County (CTCLC) offers 16 career areas to 8 area school districts in addition to non-public and other non-participating districts when requested.

Programs are designed to be three years in length, beginning in sophomore year.

CTCLC Program Areas Include:

Automotive Technology
Building Mechanics Trades
Carpentry
Child Development
Collision Repair
Cosmetology
Creative Communications, Digital Communications
Creative Communications, Graphic Production
Creative Communications, Illustration and Design
Culinary Arts
Electrical Construction & Maintenance
Health Occupations
Information Systems Technology, Computer Networking Infrastructure
Information Systems Technology, Cyber Security
Masonry
Plumbing & Heating
Protective Services
Service Occupations
Welding Technology

COURSE OFFERINGS AND DESCRIPTIONS

DUAL ENROLLMENT

Students in grades 11 and 12 may qualify and earn college and high school credit concurrently through dual enrollment in Carbondale Area School District. Dual enrollment allows students the opportunity to earn college credit through courses at Carbondale Area that are taught by certified adjunct faculty at Lackawanna College and Keystone College. These courses are: U.S. History I (CAHS-AP History); Principles of Accounting (CAHS-Accounting); College Algebra (CAHS-Trigonometry/Pre-Calculus); Introduction to Statistics and Data Analysis (CAHS-Probability and Statistics); Introduction to Literature (CAHS-English 12/AP English); College Writing (CAHS-Advanced Composition); General Chemistry I (CAHS-Chemistry); General Chemistry I Lab (CAHS-Chemistry Lab), Anatomy & Physiology (CAHS-Advanced Biology), Pre-Calculus (CAHS Honors Pre-Calc/Trig), Calculus I (CAHS AP Math), Elementary Spanish I (CAHS Spanish 3), Elementary Spanish II (CAHS Spanish 4), Intro to Information Technology (CAHS AP Computer Science Principles).

In addition students may qualify and earn college and high school credit concurrently through dual enrollment in Carbondale Area School District through the following already existing courses at Lackawanna College: Introduction to Computer Applications; Introduction to Psychology; Effective Speaking; Introduction to Sociology; and Introduction to Philosophy.

Although there are costs associated with dual enrollment courses (tuition, books, and fees), it would be advantageous for the student to enroll because tuition costs are offered at a reduced rate. All costs must be paid in full at the time of registration by the student and/or parent/guardian. If you would like more information regarding dual enrollment, please contact the guidance department.

ENGLISH LANGUAGE ARTS

ENGLISH 7

This course is designed to engage students in the writing process through distinct mode-specific writing and examination of grammatical concepts in the context of their own compositions. In alignment with the Pennsylvania Core Standards, students will write arguments to support claims with clear reasons and relevant evidence, write informational texts to examine topics and convey ideas, and write narratives to develop real or imagined experiences or events. Students will also acquire enhanced strategies to write evidence-based analysis of literary and informational texts. These course writing assignments will provide the foundation for students to refine and demonstrate a command of standard English grammar and writing conventions.

GENERAL ENGLISH 7

This course is designed to engage students in the writing process through distinct mode-specific writing and examination of grammatical concepts in the context of their own compositions. In alignment with the Pennsylvania Core Standards, students will write arguments to support claims with clear reasons and relevant evidence, write informational texts to examine topics and convey

ideas, and write narratives to develop real or imagined experiences or events. Students will also acquire enhanced strategies to write evidence-based analysis of literary and informational texts. These course writing assignments will provide the foundation for students to refine and demonstrate a command of standard English grammar and writing conventions. Remediation for the general level is addressed in daily lessons and assignments as needed.

READING 7

The purpose of this course is to provide instruction that enables students to accelerate the development of reading and analyzing literary fiction and informational texts. In alignment with the Pennsylvania Core Standards, instruction will emphasize reading comprehension, evidence-based writing, and vocabulary study through the use of a variety of literary and informational texts encompassing a broad range of text structures, genres, and levels of complexity. This reading course incorporates guided practice, modeling of reading strategies, and small group literature circles that will enable students to enhance their overall reading performance. Enrollment in this course is based on teacher recommendation.

READING II 7

The purpose of this course is to provide instruction that enables students to accelerate the development of reading and analyzing literary fiction and informational texts. In alignment with the Pennsylvania Core Standards, instruction will emphasize reading comprehension, evidence-based writing, and vocabulary study through the use of a variety of literary and informational texts encompassing a broad range of text structures, genres, and levels of complexity. This differentiated reading course incorporates small group instruction with intensive guided practice and modeling of reading strategies that will enable students to improve their overall reading performance. Enrollment in this course is based on teacher recommendation.

ENGLISH 8

This course is designed to engage students in the writing process as they build upon prior knowledge of mode-specific writing skills and examine grammatical concepts in the context of their own compositions. In alignment with the Pennsylvania Core Standards, students will write arguments to support claims with clear reasons and relevant evidence, write informational texts to examine topics and convey ideas, and write narratives to develop real or imagined experiences or events. Students will also acquire enhanced strategies to write evidence-based analysis of literary and informational texts. These course writing assignments will provide the foundation for students to refine and demonstrate a command of standard English grammar and writing conventions.

GENERAL ENGLISH 8

This course is designed to engage students in the writing process as they build upon prior knowledge of mode-specific writing skills and examine grammatical concepts in the context of their own compositions. In alignment with the Pennsylvania Core Standards, students will write arguments to support claims with clear reasons and relevant evidence, write informational texts to examine topics and convey ideas, and write narratives to develop real or imagined experiences or events. Students will also acquire enhanced strategies to write evidence-based analysis of literary and informational texts. These course writing assignments will provide the foundation for students to refine and demonstrate a command of standard English grammar and writing

conventions. Remediation for the general level is addressed in daily lessons and assignments as needed.

READING 8

This course is a continuation of the literary foundation provided in previous English-Language Arts classes, and in alignment with the Pennsylvania Core Standards, it prepares students for the requirements of high school English courses. The course enables students to strengthen their independent reading and comprehension skills through a wide range of informational and literary texts, including content-area readings. Students will be required to work both independently and in small group settings to engage in close and careful reading of increasingly complex texts and to apply note-taking techniques to further reinforce and enhance overall reading comprehension. Emphasis on reading comprehension strategies will help students further develop a detailed and critical analysis of each class text, while providing opportunities to refine discussion skills through extensive peer collaboration and to formulate evidence-based responses orally and in writing. This course also encourages students to engage in more challenging opportunities for question-generation and research-related extensions of class topics.

READING II 8

This course is a continuation of the literary foundation provided in previous English-Language Arts classes, and in alignment with the Pennsylvania Core Standards, it prepares students for the requirements of high school English courses. Through modeled reading strategies, students will engage in close and careful reading of informational and literary texts and use note-taking techniques to further develop and reinforce reading comprehension. Opportunities for question-generation and evidence-based responses to reading will further guide students to develop a more detailed and critical analysis of each text. Drawing from these various reading selections, students will primarily participate in whole group and small group text-based discussions. Remediation will be provided as needed while students engage in reading and responding to complex texts to improve their overall reading performance and appreciation of literary texts.

READING III 8

This course is a continuation of the literary foundation provided in previous English-Language Arts classes, and in alignment with the Pennsylvania Core Standards, it prepares students with fundamental skills to succeed in high school English courses. This course assists students in the mastery of grade-level reading and provides them opportunities to comprehend grade-level informational and literary texts with a gradual increase in the amount and complexity of independent reading throughout the school year. Students will be guided to establish routine comprehension strategies while working in whole-group, small-group, and independent settings to complete close and careful reading and to use note-taking and question-generation techniques. Students will further be facilitated through text-based discussions and the development of evidence-based responses orally and in writing. Remediation will be provided as needed while students engage in reading, analysis, and response to grade-level complex texts.

ENGLISH 9

This course is an introduction to World Literature and is arranged instructionally through reading and studying various genres, which include fiction, nonfiction, short stories, mythology, the epic, poetry, drama, and the memoir. Each genre is presented in a comparative structure to previously

read texts to distinguish between several types of writings and the characteristics of each. In addition, each new text selection is introduced with the historical context to discover the influence of the time period and its reflection within the writing. All texts are read and examined closely to further discover timeless themes and their relevance to the present. Students are provided opportunities to improve and expand their skills in the overall process of writing to strengthen their organizational and analytical skills, as well as encourage proper grammar, vocabulary, and composition. Writing assignments are aligned in accordance with the Pennsylvania Core Standards as seen in the various modes, including narrative writing, persuasive writing, informative writing, and a research paper.

GENERAL ENGLISH 9

This course is an introduction to World Literature and is arranged instructionally through reading and studying various genres, which include fiction, nonfiction, short stories, mythology, the epic, poetry, drama, and the memoir. Each genre is presented in a comparative structure to previously read texts to distinguish between several types of writings and the characteristics of each. In addition, each new text selection is introduced with the historical context to discover the influence of the time period and its reflection within the writing. All texts are read and examined closely to further discover timeless themes and their relevance to the present. Students are provided opportunities to improve and expand their skills in the overall process of writing to strengthen their organizational and analytical skills, as well as encourage proper grammar, vocabulary, and composition. Writing assignments are aligned in accordance with the Pennsylvania Core Standards as seen in the various modes, including narrative writing, persuasive writing, informative writing, and a research paper. Remediation for the general level is addressed in daily lessons and assignments as needed.

READING 9

Students are recommended for this course to further develop essential skills in comprehension and analysis of fiction and nonfiction texts and to reinforce the construction of text-based written responses. Reading strategies are presented and incorporated through a novel-based approach to enhance fluency and comprehension skills that are vital to successful readers. In alignment with the Pennsylvania Core Standards, students will enhance and utilize effective strategies to analyze an author's purpose and how it is achieved in literature, as well as to compare, analyze, and evaluate literary elements. To further aid reading comprehension and analysis, students will refine their strategies to determine and clarify the meaning of vocabulary, and they will identify and explain stated or implied main ideas and relevant supporting details in a text.

ENGLISH 10

This course is a study of World Literature as well as composition. A survey of significant global authors and genres are presented within a framework of ancient literature through 20th Century works. Students analyze literary selections within their historical and social contexts, evaluate the influences each has on the writing of its time, and examine various literary concepts demonstrated through these selections. The course also provides opportunities for students to enhance reading comprehension and analysis of nonfiction texts. In addition, the integration of composition emphasizes the writing process with a focus on students recognizing and revising grammar, usage, agreement, and sentence structure within their own writing. In accordance with the Pennsylvania Core Standards, writing assignments provide practice of informative and

argumentative modes, as well as analysis of class readings and literary concepts demonstrated in those works.

GENERAL ENGLISH 10

This course is a study of World Literature as well as composition. A survey of significant global authors and genres are presented within a framework of ancient literature through 20th Century works. Students analyze literary selections within their historical and social contexts, evaluate the influences each has on the writing of its time, and examine various literary concepts demonstrated through these selections. The course also provides opportunities for students to enhance reading comprehension and analysis of nonfiction texts. In addition, the integration of composition emphasizes the writing process with a focus on students recognizing and revising grammar, usage, agreement, and sentence structure within their own writing. In accordance with the Pennsylvania Core Standards, writing assignments provide practice of informative and argumentative modes, as well as analysis of class readings and literary concepts demonstrated in those works. Remediation for the general level is addressed in daily lessons as needed.

ENGLISH 11

This course is a study of American Literature as well as composition. A survey of significant American authors and their works are presented chronologically from the Age of Exploration to the present time. Students examine major literary movements and analyze selections within those historical contexts to understand how American Literature has evolved. Various literary concepts and key vocabulary will also be demonstrated through these representative readings of non-fiction, short story, poem and drama. In addition, the composition component of this course emphasizes writing as a process with a grammar focus on usage, agreement, sentence structure, and punctuation in the context of the student's writings. In accordance with the Pennsylvania Core Standards, writing assignments provide practice of informative and argumentative modes, as well as analysis of class readings and literary concepts demonstrated by those works. Students will also create a résumé and complete their Senior Project Research Reports toward fulfillment of their graduation requirement.

GENERAL ENGLISH 11

This course is a study of American Literature as well as composition. A survey of significant American authors and their works are presented chronologically from the Age of Exploration to the present time. Students examine major literary movements and analyze selections within those historical contexts to understand how American Literature has evolved. Various literary concepts and key vocabulary will also be demonstrated through these representative readings of non-fiction, short story, poem and drama. In addition, the composition component of this course emphasizes writing as a process with a grammar focus on usage, agreement, sentence structure, and punctuation in the context of the student's writings. In accordance with the Pennsylvania Core Standards, writing assignments provide practice of informative and argumentative modes, as well as analysis of class readings and literary concepts demonstrated by those works. Students will also create a résumé and complete their Senior Project Research Reports toward fulfillment of their graduation requirement. Remediation for the general level is addressed in daily lessons as needed.

AP ENGLISH LITERATURE AND COMPOSITION [12TH Grade]

This course is designed to comply with curricular requirements described in the AP English Course Description, and will prepare students for the AP exam in English Literature and Composition. This course is an intensive study of representative works of British Literature as well as composition. A survey of significant British authors and their works are presented chronologically from 449AD to the present. Students will be required to read independently, analyze and interpret material, and form impressions and emotional responses that lead to understanding and independent assessment of literary works. All literary selections will include intensive vocabulary development to assist in comprehending the complexity of each work. In addition, assigned compositions emphasize writing as a process with standard English usage, agreement, sentence structure, and punctuation assessed in the context of the student's writing. Writing assignments reflect accordance with the Pennsylvania Core Standards as seen in the informative and argumentative modes and class research component, as well as analysis of class readings and literary concepts demonstrated by those works.

ENGLISH 12

This course is a study of British Literature as well as composition. A survey of significant British authors and their works are presented chronologically from 449 AD to the present. Students analyze selections within their historical context and examine literary concepts as seen in each. In addition, assigned compositions emphasize writing as a process with standard English usage, agreement, sentence structure, and punctuation assessed in the context of the student's writing. Writing assignments reflect accordance with the Pennsylvania Core Standards as seen in the informative and argumentative modes, literary response, and class research component.

GENERAL ENGLISH 12

This course is a study of British Literature as well as composition. A survey of significant British authors and their works are presented chronologically from 449 AD to the present. Students analyze selections within their historical context and examine literary concepts as seen in each. Composition emphasizes writing as a process with a grammar focus on usage, agreement, sentence structure, and punctuation in the context of the student's writings. In addition, assigned compositions emphasize writing as a process with standard English usage, agreement, sentence structure, and punctuation assessed in the context of the student's writing. Writing assignments reflect accordance with the Pennsylvania Core Standards as seen in the informative and argumentative modes, literary response, and class research component. Remediation for the general level is addressed in daily lessons as needed.

ADVANCED COMPOSITION [11TH-12TH Grade]

PREREQUISITE: Students must have completed their previous year's English course with a minimum average of 85 and the recommendation of that English teacher.

Advanced Composition is an elective course that engages students in the writing process to proficiently develop original pieces of personal and expressive writing, observation and description, narrative and literary response, informative exposition, and analysis in accordance with Pennsylvania Core Standards. Students will be expected to write in various genres, including, but not restricted to, college application essays, memoirs, pictorial essays, song lyrics, eyewitness reports, as well as short story, dramatic scene, and research writing. Students will

compose essays following standard MLA format. They will further apply independent editing and revision skills, as well as peer review of each assignment, to develop a wide-ranging vocabulary, a variety of sentence structures, and logical organizational skills. Discussed at length are shifting perspectives, language and craft, focus on the writer, and making story connections. Students will compile a working portfolio of their writing throughout the year, while selecting and revising one original piece per quarter to submit in a final portfolio at the end of the school year.

Since publishing written work is a component of the writing process, students will also be responsible for submitting one piece of writing per quarter to the on-line literary magazine *TeenInk*. Students may submit the work of their choosing, but they must present proof to the teacher by a specified due date that a piece of writing was submitted.

YEARBOOK PUBLICATION/NEWSPAPER [10TH through 12TH GRADES]

Pre-requisite Satisfactory Completion of English courses and Teacher Recommendation

The objective of this course is not only to create the school yearbook, but also to prepare students for a journalistic profession. The course involves direct experience with these journalistic skills: organization, drawing and design, layout, financing, and production, as well as writing, editing, and proofreading. Students taking this course should plan to follow through the production cycle through the spring semester.

This course is designed to develop students' skills in writing articles, captions, headlines, photography, desktop publishing, and technology tools for media production. Throughout the course, students will take on the roles of writers, photographers, and editors. Students will also be required to attend events beyond the school day to acquire eyewitness accounts and in the moment photos of events. Students will also engage in conducting interviews. Editions of the newspaper will be published on the school's website quarterly, and the yearbook will be published by the end of the school year.

LIBRARY SCIENCE I [7TH GRADE]

This course provides seventh grade students with a thorough introduction to the school library and a full understanding as to utilizing this or other library facilities to their greatest potential. The foundation of library skills is provided through topics such as the general arrangement of the library, types of library resources, and knowledge of OPAC searches. To encourage students' independent navigation of library resources, they learn to distinguish shelf arrangement of fiction and nonfiction books by related call numbers and Dewey Decimal Classifications; likewise, to encourage the responsible use of information, students learn about plagiarism and standard MLA documentation to credit the sources available for their research. This course further provides students with basic information skills that help them to evaluate and select appropriate print and electronic resources to complete content area assignments and to utilize text features to locate and understand information most effectively.

LIBRARY SCIENCE II [10TH GRADE]

This course offers tenth grade students the opportunity to learn in detail the necessary steps involved in writing a coherent, well-planned research paper. Students initially review the

primary print and electronic resources available for library research and build a foundation of skills in appropriate source selection, website evaluation, and the prevention of plagiarism through note-taking strategies and the most current MLA documentation style. Following the Big6 Skills for Information Problem Solving, students are then guided through the stages of the research process to compile an independently written research report.

SAT PREP: LANGUAGE

Students should have successfully completed English 10 and be enrolled in English 11. The SAT Language Preparation Course is a course designed to the needs of students in an effort to better prepare them for the Evidence-Based Reading and Writing section of the SAT. The course will cover topics from – analyzing author’s purpose and content, evaluating expression of ideas and writing style, assessing grammatical accuracy, and determining vocabulary in context. Activities and assignments in SAT Language are geared toward the individual needs of the students and will encourage proper grammar, vocabulary, and composition. Excerpts from classical works, contemporary fiction and nonfiction, informational texts, and science-based texts will be included to ensure reading stamina and comprehension of various genres.

The course’s objectives, content, and activities prepare students to meet the SAT topical outline as provided by the College Board.

FINE ARTS

ART

ART 7

Art 7, is a discipline-based art curriculum with its balance of content from four foundational art disciplines, art production, art history, art criticism, and aesthetics. It is a four-quarter course, which meets, three times in a six-day cycle. This course is designed to build upon and increase the student’s knowledge of the elements and principles of design through work with a variety of media and techniques. Art 7 allows students to develop their abilities, to make critical judgments about art and to understand and appreciate the influences of art from other times and cultures.

ART I

Art I is a full credit course that meets for one class period daily for the entire school year. It is an introductory course that combines studio production (learning to make art), art history (learning about art), and criticism/aesthetics (learning about art). It begins with an introduction to visual vocabulary. Emphasis is placed on helping the student to develop a working knowledge of art elements and principles and basic drawing and painting skills. This is accomplished through a series of lectures and teacher demonstrations that culminates in studio activities. It allows students to experience working with a variety of media as they explore the link between artistic theory and individual creativity.

ART II

Art II is a full credit course that meets for one class period daily for the entire school year. This course combines studio production (learning to make art), art history (learning about art), and criticism/aesthetics (learning about art). It begins with a review of basic visual vocabulary. Emphasis is placed on helping the student to further develop a working knowledge of art

elements and principles and strengthening basic drawing and painting skills. This is accomplished through a series of lectures and teacher demonstrations that culminates in studio activities. It allows students to experience working with a variety of media as they explore the link between artistic theory and individual creativity and self-critique.

ART III

Art III is a full credit course that meets for one class period daily for the entire school year. This course combines studio production (learning to make art), art history (learning about art), and criticism/aesthetics (learning about art). It begins with a brief review of basic visual vocabulary and is followed with the introduction of advanced visual vocabulary. Emphasis is focused on helping the student to further develop and assess the use of art elements and principles in their work and the work of others. Use of color, shading and personal style development is emphasized. This is accomplished through a series of lectures and teacher demonstrations that culminates in studio activities. It allows students to experience working with a variety of media as they explore, compare, and contrast the link between artistic theory, individual creativity/style and self-critique.

THEATER ARTS [9TH through 12TH Grades]

This introductory course is designed for the student who wants to act in major plays, musicals, and competitive theater at the high school or career level or who simply wants an introduction to the theater. Emphasis is on acting, play analysis, and play directing. Make-up techniques, basic set and costume design, and a brief history of theater are included.

MUSIC

It is a requirement that all 7th grade students MUST participate in either 7th grade general music, band or chorus.

It is a requirement that all 9th grade students MUST participate in either 9th grade general music, band or chorus.

BEGINNING BAND

Beginning band is designed to provide students with an introductory experience on band instruments. Students will begin their study of instrumental music and standard performance practices on woodwind, brass, and percussion instruments. Instruction areas include ensemble rehearsal and performance techniques, musicianship, tone production, festival performance, self-critique techniques and music literacy. Beginning Band is open to all 7th grade students who are required to take a music class whether band, chorus or general music. Student lessons will be available during the day and will be graded on attendance. Students are expected and encouraged to practice their instrument at home and must be available for evening concerts and performances, as it is part of the student's grade. Dress rehearsals will be held before each concert, which are also part of the student's grade. Pre-requisite: Prior instrumental music experience is not required.

ADVANCED BAND

Advanced band is designed to provide students with a performance experience with music at the easy-medium to medium-hard level and will include both new and old compositions from the wind band repertoire, in addition to continue developing fundamental music elements to help strengthen students' musical abilities in a performance setting. Instruction areas include proper instrument techniques, proper fingerings/slide positions for each instrument, development of quality tone production and performance range, basic music theory, major scales, and performing in modes, all the while gaining a strong understanding of performing as an ensemble. Playing exams will be conducted during each grading period to include excerpts from the music being performed in class and scales. Student lessons will be available during the day and will be graded on attendance. Students are expected and encouraged to practice their instrument at home and must be available for evening concerts and performances, as it is part of the student's grade. Dress rehearsals will be held before each concert, which are also part of the student's grade. Pre-requisite: Prior instrumental music study in elementary and beginning band is encouraged in addition to a positive attitude and genuine desire to contribute to a musical performing ensemble. The Advanced Band consists of students in 9th grade who wish to perform in an instrumental ensemble and for those who wish to continue their instrumental music performing experience.

GENERAL MUSIC 7

General Music 7 is a study of basic music and music appreciation. The students will learn the history of the Star-Spangled Banner, music of the Armed Forces, Carbondale Area's Alma Mater, copyright, music theory and composition, musical careers, and music in the cinema. Units and course work are focused on music in everyday life. Challenging course work will include writing a song parody, writing an original composition, and a research project on musical careers and dramatic work of cinematic music.

GENERAL MUSIC 9

General Music 9 is a study of the art of music and music appreciation. Along with historical and theoretical studies, there will also be a focus on music technology. This focus includes computer music labs and a variety of challenging work that will integrate the music art form with 21st century learning.

JUNIOR HIGH CHORUS

Chorus provides an opportunity for participating students to become acquainted with two, three, and four-part harmony, solo performance, group participation, community involvement, organizational skills, public performance and self-esteem. Students will also become familiar with conventional musical selections, world songs, foreign pieces and more unconventional texts and pieces (including holiday, classical, show tunes, standards, etc.). Students will also learn to work as a "team" and to work with each other's talents and excitement for the art of singing.

SENIOR HIGH CHORUS

Chorus provides an opportunity for participating students to become acquainted with two, three, and four-part harmony, solo performance, group participation, community involvement, organizational skill, public performance and self-esteem. Students will also become familiar with

conventional musical selections, familiar with world songs, foreign pieces and more unconventional texts and pieces (including holiday, classical, show tunes, standards, etc.). Students will also learn to work as a “team” and to work with each other’s talents and excitement for the art of singing.

ADVANCED CHORUS

Advanced Chorus, a full credit course, provides an opportunity for participating students to study, rehearse, and perform choral music. In doing so, proper techniques for healthy, intelligent singing are discussed and demonstrated through performance of the choral literature. A basic understanding of music theory is gained through daily rehearsals. Students learn and improve on music reading ability during daily sight-reading exercises and periodic sight-reading tests. Students have the opportunity to audition for and/or participate in All-State Choirs, All-County Choirs, NEIU19 District Chorus, District Solo and Ensemble Festival, Community Performances and Music Honor Society. After school, evening, and weekend activities are part of the course requirements.

MATHEMATICS

MATH 7

The Math 7 course is a highly rigorous course that includes the arithmetic of, as well as converting between, all types of rational numbers – whole numbers, fractions, mixed numbers, terminating decimals, repeating decimals, percentages, and signed numbers. Proportional relationships are explored through the use of ratios, unit rates, and constant of proportionality, simple interest, tax, tips, fees, commission, markup/markdown, and percent of increase/decrease. In addition to signed numbers, the pre-algebra concepts of variables; generating and creating equivalent expressions; and writing, solving, and graphing equations and inequalities are introduced. Also integrated are a variety of geometry topics such as scale drawings, triangle properties, triangle inequality theorem, slicing three-dimensional figures, angle relationships, circumference, area, surface area, and volume. Lastly addressed are the concepts of statistics and probability which include random sampling, drawing inferences about populations, measures of central tendency, variability, simple/compound probability, and likelihood of events occurring. Incorporated throughout the covered topics is calculator/technology use and multi-step applications/word problems that relate mathematical concepts to real life problem solving. The course curriculum, content, objectives, instruction, activities, and assessments are aligned with and prepare students to meet the Pennsylvania 7th Grade Common Core Standards for Mathematics.

GENERAL MATH 7

The General Math 7 course includes the arithmetic of, as well as converting between, all types of rational numbers – whole numbers, fractions, mixed numbers, terminating decimals, repeating decimals, percentages, and signed numbers. Proportional relationships are explored through the use of ratios, unit rates, and constant of proportionality, simple interest, tax, tips, fees, commission, markup/markdown, and percent of increase/decrease. In addition to signed numbers, the pre-algebra concepts of variables; generating and creating equivalent expressions; and writing, solving, and graphing equations and inequalities are introduced. Also integrated are

a variety of geometry topics such as scale drawings, triangle properties, triangle inequality theorem, slicing three-dimensional figures, angle relationships, circumference, area, surface area, and volume. Lastly addressed are the concepts of statistics and probability which include random sampling, drawing inferences about populations, measures of central tendency, variability, simple/compound probability, and likelihood of events occurring. Incorporated throughout the covered topics is calculator/technology use and multi-step applications/word problems that relate mathematical ideas to real life problem solving. The course curriculum, content, objectives, instruction, activities, and assessments are aligned with and prepare students to meet the Pennsylvania 7th Grade Common Core Standards for Mathematics.

HONORS ALGEBRA I

This course includes further study of solving linear equations, including those with extraneous solutions, properties of real numbers, proportional relationships, probability, inequalities, estimation, greatest common factor, and least common multiple. The course extends the study of volume to include cones, cylinders, and spheres. The course introduces students to systems of linear equations and inequalities in two variables, in addition to exponent equations. Students will learn how to simplify exponent expressions, find equations and identify properties of functions, and perform operations in and apply scientific notation. Students will learn how to use the Pythagorean Theorem and about the properties of the Objects of Transformation. Students will learn how to construct and interpret scatter plots and two-way tables when given a set of data. The students will learn how to interpret data using measures of central tendency. Students will learn how to simplify expressions involving roots, absolute value symbols, and exponents. Students will be introduced to polynomial operations and factoring. Emphasis will be placed on real world application problems and higher level thinking word problems. Calculators are incorporated per the PA Common Core Standards. The course curriculum, instruction, and assessment are aligned with the Pennsylvania Common Core Standards for Mathematics. The course's objectives, content, and activities prepare students to meet both the 8th Grade and Algebra I Common Core Standards.

PRE-ALGEBRA

This course includes further study of solving linear equations, including those with extraneous solutions, properties of real numbers, and proportional relationships. The course extends the study of volume to include cones, cylinders, and spheres. The course introduces students to systems of linear equations in two variables, in addition to exponent equations. Students will learn how to simplify exponent expressions, find equations and identify properties of functions, and perform operations in and apply scientific notation. Students will learn how to use the Pythagorean Theorem and about the properties of the Objects of Transformation. Students will learn how to construct and interpret scatter plots and two-way tables when given a set of data. The students will learn how to interpret data using measures of central tendency. Emphasis will be placed on real world application problems and higher level thinking word problems. Calculators are incorporated per the PA Common Core Standards. The course curriculum, instruction, and assessment are aligned with the Pennsylvania Common Core Standards for Mathematics. The course's objectives, content, and activities prepare students to meet the 8th Grade Common Core Standards.

MATH 8

This course is very similar to the Pre-Algebra course; however, it allows for further review of basic math concepts in addition to the introduction of new concepts. Math 8 includes further study of solving linear equations, including those with extraneous solutions, properties of real numbers, and proportional relationships. The course extends the study of volume to include cones, cylinders, and spheres. The course introduces students to systems of linear equations in two variables, in addition to exponent equations. Students will learn how to simplify exponent expressions, find equations and identify properties of functions, and perform operations in and apply scientific notation. Students will learn how to use the Pythagorean Theorem and about the properties of the Objects of Transformation. Students will learn how to construct and interpret scatter plots and two-way tables when given a set of data. The students will learn how to interpret data using measures of central tendency. Although real world application problems and higher level thinking word problems are covered, oftentimes the breadth and depth of those questions are on a lower level than in Pre-Algebra. Calculators are incorporated per the PA Common Core Standards. The course curriculum, instruction, and assessment are aligned with the Pennsylvania Common Core Standards for Mathematics. The course's objectives, content, and activities prepare students to meet the 8th Grade Common Core Standards.

ALGEBRA I

The course involves: the study of variables; expressions and formulas; signed numbers; rational and irrational numbers; polynomials and operations; first degree equations; word problem applications; factoring; monomial and polynomial operations; solution of quadratic equations; algebraic fractions; linear equations in two variables; the Cartesian Coordinate System; linear equations and systems; powers, roots and radicals; and inequalities. Lessons, activities and assignments in Academic Algebra I are structured toward average ability students. Scientific calculators and computer aides are incorporated using Pennsylvania Keystone Algebra I standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by PA Education Code 22, Chapter 4 Regulations.

CONCEPTS OF ALGEBRA 1A

The course contains the following mathematical topics: connections to algebra - variables, expressions and formulas; real 44 numbers - signed numbers, rational and irrational numbers; solving and graphing linear equations, inequalities and functions; writing linear equations; solving systems of linear equations, and inequalities; polynomial operations and factoring; rational expressions and equations; radicals; exponents and exponentials; quadratic equations; and word problem applications. Lessons, activities and assignments are structured toward basic ability students and aimed at success in algebra. Scientific calculators and computer aides are incorporated using Pennsylvania Keystone Algebra I standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by PA Education Code 22, Chapter 4 Regulations. The course's objectives, content, and activities prepare students to meet the PA Academic Standards for Mathematics.

CONCEPTS OF ALGEBRA 1B

It is expected that a student previously has passed Concepts of Algebra 1A. Concepts of Algebra 1B is an extension of the Concepts of Algebra 1A curriculum. Topics that were first introduced in Concepts of Algebra 1A will be built upon and applied to problems that require higher order thinking skills. Additional topics will also be introduced in a variety of methods, including self-discovery activities, group project and presentations, and teacher led class discussions.

Fundamental skills of mathematics will be applied to such topics as functions, equations and inequalities, probability and statistics, logarithmic and exponential relationships, quadratic and polynomial equations, and matrices. Technology will be used to introduce and expand upon the areas of study listed above. Use of computers and calculators will be incorporated into each unit. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by the Pennsylvania Education Code 22, Chapter 4 regulations. The course's objectives, content, and activities prepare students to meet the PA Academic Standards for Mathematics.

HONORS ALGEBRA II

The course content, objectives, and activities prepare students to meet standards of the Algebra I and Algebra II curriculum outlined in the PA Academic Standards for Mathematics. This course will also give students background knowledge for SATs and college entrance exams in mathematics. The topics covered include the following: Properties of Real Numbers, Evaluating Algebraic Expressions, Solving Linear Equations, Using Problem Solving Strategies and Verbal Models, Solving Linear Inequalities (including Compound Inequalities), Solving Absolute Value Equations and Inequalities, Relations and Functions, Finding Slope and Rate of Change, Graphing Equations of Lines, Writing Equations of Lines, Modeling Direct Variation, Drawing Scatter Plots and Determining Lines of Best Fit, Graphing Linear Inequalities in 2 Variables, Solving Linear Systems by Graphing, Solving Linear Systems using Substitution, Solving Linear Systems using Elimination (Linear Combination), Use the Exponent Properties (Rules), Add, Subtract, and Multiply Polynomials, Factoring (6 Patterns), Using Factoring to Solve Equations, Graphing Quadratic Equations using 3 Forms (Standard, Vertex, and Intercept), Solving Quadratic Equations using Square Roots, Evaluating n^{th} roots using Rational Exponents, Applying Properties of Rational Exponents, Perform Basic Operations on Functions (Add, Subtract, Multiply, and Divide), Perform Composition of Functions, Model Direct, Inverse, and Joint Variation, Multiply and Divide Rational Expressions, Add and Subtract Rational Expressions, Solve Rational Equations, Apply the Distance and Midpoint Formulas, Apply the Counting Principles, Perform Permutations and Combinations, Define and Use Probability, Find Probabilities of Disjoint and Overlapping Events, Find Probabilities of Independent and Dependent Events, Find Measures of Central Tendency (Mean, Median, Mode, Range, Quartiles, Inter-Quartile Range, Box and Whisker Plots, and Stem and Leaf Plots), Define and Use Sequences, Analyze Arithmetic Sequences, Analyze Geometric Sequences, Perform Operations with Complex Numbers, Use Completing the Square to Solve Quadratic Equations, Use the Quadratic Formula to Solve Quadratic Equations, Find the Discriminant of a Quadratic Equation, Graph and Solve Quadratic Inequalities, and Write Quadratic Functions and Models. The main difference between Algebra II and Honors Algebra II is more in depth problems with the Honors Algebra II.

ALGEBRA II

The course content, objectives, and activities prepare students to meet standards of the Algebra I and Algebra II curriculum outlined in the PA Academic Standards for Mathematics. This course will also give students background knowledge for SATs and college entrance exams in mathematics. The topics covered include the following: Properties of Real Numbers, Evaluating Algebraic Expressions, Solving Linear Equations, Using Problem Solving Strategies and Verbal Models, Solving Linear Inequalities (including Compound Inequalities), Solving Absolute Value Equations and Inequalities, Relations and Functions, Finding Slope and Rate of Change, Graphing Equations of Lines, Writing Equations of Lines, Modeling Direct Variation, Drawing Scatter Plots and Determining Lines of Best Fit, Graphing Linear Inequalities in 2 Variables, Solving Linear Systems by Graphing, Solving Linear Systems using Substitution, Solving Linear Systems using Elimination (Linear Combination), Use the Exponent Properties (Rules), Add, Subtract, and Multiply Polynomials, Factoring (6 Patterns), Using Factoring to Solve Equations, Graphing Quadratic Equations using 3 Forms (Standard, Vertex, and Intercept), Solving Quadratic Equations using Square Roots, Evaluating n^{th} roots using Rational Exponents, Applying Properties of Rational Exponents, Perform Basic Operations on Functions (Add, Subtract, Multiply, and Divide), Perform Composition of Functions, Model Direct, Inverse, and Joint Variation, Multiply and Divide Rational Expressions, Add and Subtract Rational Expressions, Solve Rational Equations, Apply the Distance and Midpoint Formulas, Apply the Counting Principles, Perform Permutations and Combinations, Define and Use Probability, Find Probabilities of Disjoint and Overlapping Events, Find Probabilities of Independent and Dependent Events, Find Measures of Central Tendency (Mean, Median, Mode, Range, Quartiles, Inter-Quartile Range, Box and Whisker Plots, and Stem and Leaf Plots), Define and Use Sequences, Analyze Arithmetic Sequences, Analyze Geometric Sequences, Perform Operations with Complex Numbers, Use Completing the Square to Solve Quadratic Equations, Use the Quadratic Formula to Solve Quadratic Equations, Find the Discriminant of a Quadratic Equation, Graph and Solve Quadratic Inequalities, and Write Quadratic Functions and Models.

HONORS GEOMETRY

The course involves: the concepts of point, line and plane; angles and triangles; postulates and theorems; parallel lines and planes; quadrilaterals; logical statements; congruence and similarity; Pythagorean Theorem; right triangles and trigonometric ratios; angles and lines related to circles; perimeters, areas and volumes including similar figures; and circumferences, arc lengths and area of sectors. The traditional theorem/proof approach to geometry is enhanced using numerical and algebraic applications. Lessons, activities and assignments are structured to challenge above average ability students. Scientific calculators are incorporated using Pennsylvania Geometry standards. Above average ability in mathematics as determined by recommendation of the Honors Algebra I mathematics teacher and guidance data required for admission. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by PA Education Code 22, Chapter 4 Regulations. Prerequisites: Students must complete Honors Algebra I and Honors Algebra II.

GEOMETRY

The course involves: the concepts of point, line and plane; angles and triangles; postulates and theorems; parallel lines and planes; quadrilaterals; logical statements; congruence and similarity; Pythagorean Theorem; right triangles and trigonometric ratios; angles and lines related to circles;

perimeters, areas and volumes including similar figures; and circumferences, arc lengths and area of sectors. The traditional theorem/proof approach to geometry is enhanced using numerical and algebraic applications. Lessons, activities and assignments are structured toward average ability students. Scientific calculators are incorporated using Pennsylvania Geometry standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by PA Education Code 22, Chapter 4 Regulations. Prerequisites: Students must complete Algebra I and Algebra II or have a teacher recommendation after Algebra I.

INFORMAL GEOMETRY

The course covers the basics of geometry by using arithmetic calculations and simple geometric formulas. Lessons, activities and assignments are designed for success in geometry. Course topics include: the concepts of point, line and plane; angles and triangles; postulates and theorems; parallel lines; quadrilaterals, parallelograms, and polygons; congruence and similarity; Pythagorean Theorem; circles and angles and lines; perimeters, areas and volumes including similar figures; circumferences, arc lengths and areas of sectors; right triangles; and coordinate geometry. Scientific 45 calculators are incorporated using Pennsylvania Geometry standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by PA Education Code 22, Chapter 4 Regulations.

PROBABILITY AND STATISTICS

Probability and Statistics is a full year course designed for students in grades 11 and 12 who have experienced above-average success in Algebra I, Geometry, and Algebra II (85% average and above). An Introduction to Statistics is necessary for students who plan to enter such fields as economics, business, psychology, sociology, biology, medicine, or mathematics. This course will help prepare a student for future advanced courses in probability and statistics. Students enrolled in this course need to have strong skills in mathematics. Students will be required to complete projects based on their collection of data outside the classroom.

HONORS PRE-CALCULUS/TRIGONOMETRY

This course is for the student who has completed Honors Algebra 1, Honors Algebra 2, and Honors Geometry. This course is broken into two parts: Pre-Calculus and Trigonometry. The first part of the course, Pre-Calculus, is designed to prepare students for topics covered in a Calculus course. It begins with a comprehensive study of functions and moves into an analysis of rudimentary calculus concepts such as the difference quotient and the notion of “taking a limit.” In addition to introducing students to terminology and concepts essential to the study of Calculus, this course should also help students develop reasoning and analytical skills which may be applied to problems outside the typical realm of mathematics. The second part of the course, Trigonometry, focuses on trigonometric principles as an extension of algebraic and geometrical concepts. Students will study angles, arcs, the unit circle, right triangle trigonometry, the six trigonometric functions, inverse functions, fundamental trigonometric identities, verifying trigonometric identities, solving trigonometric equations, the law of sines, the law of cosines, vectors, and polar coordinates. Graphing calculators, scientific calculators and computer aides will be incorporated using the Pennsylvania and National Standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for

Mathematics as mandated by the Pennsylvania Education Code 22, Chapter 4 regulations. The course's objectives, content and activities prepare students to meet the Pre-Calculus and Trigonometry benchmarks as outlined in the Pennsylvania Academic Standards for Mathematics. Students who take the honors version of this course will learn a broader, more contextualized, more richly detailed version of the topics listed. The course will be fast-paced and the students will receive more academically challenging assignments as compared to the academic course.

PRE-CALCULUS/TRIGONOMETRY

This course is for the student who has completed Algebra 1, Algebra 2, and Geometry. This course is broken into two parts: Pre-Calculus and Trigonometry. The first part of the course, Pre-Calculus, is designed to prepare students for topics covered in a Calculus course. It begins with a comprehensive study of functions and moves into an analysis of rudimentary calculus concepts such as the difference quotient and the notion of "taking a limit." In addition to introducing students to terminology and concepts essential to the study of Calculus, this course should also help students develop reasoning and analytical skills which may be applied to problems outside the typical realm of mathematics. The second part of the course, Trigonometry, focuses on trigonometric principles as an extension of algebraic and geometrical concepts. Students will study angles, arcs, the unit circle, right triangle trigonometry, the six trigonometric functions, inverse functions, fundamental trigonometric identities, verifying trigonometric identities, solving trigonometric equations, the law of sines, the law of cosines, vectors, and polar coordinates. Graphing calculators, scientific calculators and computer aides will be incorporated using the Pennsylvania and National Standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by the Pennsylvania Education Code 22, Chapter 4 regulations. The course's objectives, content and activities prepare students to meet the Pre-Calculus and Trigonometry benchmarks as outlined in the Pennsylvania Academic Standards for Mathematics.

AP CALCULUS AB

AP Calculus is available to students who have completed Honors Pre-Calculus/Trigonometry. AP Calculus is an advanced placement elective course, which is equivalent to a full academic's year of work in Calculus and related topics, comparable to courses in colleges and universities. Students must have a thorough knowledge of college preparatory mathematics algebra, trigonometry, and geometry. Students will be encouraged to take the Advanced Placement Calculus examination offered by Educational Testing Service (ETS) of the College Board. The course begins with a review of Pre-Calculus concepts essential to the study of Calculus. The concepts of limits and their properties are covered in detail. The two branches of Calculus, differentiation and integration, are covered extensively, along with chapters on the applications of both topics. The course concludes with more advanced integration techniques. Professional mathematics organizations have strongly endorsed the use of graphing calculators in mathematics instruction and consequently these calculators are also used throughout the course and are required for a portion of the AP exam AB. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by the Pennsylvania Education Code 22, Chapter 4 regulations. The course's objectives, content and activities prepare students for the AP Calculus AB exam.

FINANCIAL ALGEBRA [12TH GRADE]

Financial Algebra is designed to develop a strong foundation in logical thinking and problem solving that will enable students to make informed decisions regarding matters of money and finance in their daily lives. This course furthers the development of functions, which include linear, piece-wise, quadratics, and step functions. Other topics studied include measures of center and spread, graphical representations of data, principles of finance economics, employment, payroll, loans, compound interest and continuous interest, credit card debt, car ownership, and budgets. The last quarter the students proceed through the EverFi Financial Literacy program which is offered nationwide and includes the modules Savings, Banking, Credit Cards & Interest Rates, Credit Score, Financing Higher Education, Renting vs. Owning, Taxes & Insurance, Consumer Protection, and Investing.

CONSUMER MATH [12TH GRADE]

Consumer Math is designed to prepare students for life after graduation by giving them a basic understanding of the mathematics they will encounter on a daily basis. This course explores the topics of Employment Basics, Banking Services, Credit Cards, Taxes, Automobile Purchases, Renting/Owning a Home, Budgeting, Retirement, and the Stock Market .

SAT PREP: MATH

Students should have successfully completed Algebra I, Algebra II and currently be enrolled in Geometry or Honors Pre-Calculus. The SAT Math Preparation Course is a course designed to the needs of students in an effort to better prepare them for the SAT. The course will cover topics from all sections of the mathematics portion of the SAT – Heart of Algebra, Problem Solving, Data Analysis, and Passport to Advanced Math. Lessons, activities and assignments in SAT Math are geared toward the individual needs of the students. Graphing calculators, scientific calculators and computer aides will be incorporated using the Pennsylvania and National Standards. The course curriculum, instruction and assessment are aligned with the Pennsylvania Academic Standards for Mathematics as mandated by the Pennsylvania Education Code 22, Chapter 4 regulations. The course’s objectives, content and activities prepare students to meet the SAT topical outline as provided by the College Board.

PHYSICAL EDUCATION AND HEALTH

PHYSICAL EDUCATION [7TH – 12TH GRADES]

The Physical Education Program is designed to provide students with the knowledge and ability needed to maintain an active, healthy lifestyle. Participation in the physical activities offered in this course will be geared to meet the following goals: 1.) to help all students develop into physically educated individuals, 2.) to improve physical fitness levels, sports knowledge, and sports skills, and 3.) to help develop good sportsmanship, a sense of fair play, self-control, and cooperation. Successful completion of Physical Education in each grade level is required for graduation.

HEALTH 8

The 8th grade Health Education program provides students with the information to take a positive action regarding their health. The students learn that good health habits can improve the way

they look, the way they perform in school and sports, the way they interact with others, and the way they feel about themselves. Topics covered include Self-Image, Attitudes and Values, Decision Making, Conflict Resolution, Stress Management, Communication Skills, Alcohol, Tobacco and Other Drugs, Eating Disorders, Nutrition and Fitness, Sexually Transmitted Diseases and HIV/AIDS Prevention. A Life Skills Training program is incorporated, focusing on teaching the life skills necessary for succeeding in a complex and challenging world and providing the opportunity to use these skills to better prepare the student for the challenges of life.

HEALTH 12

Health 12 is designed to give students a basic knowledge and understanding of health, wellness, and the body. The course will cover a variety of different topics including Personal Health & Wellness, Food and Nutrition, Diets for individual Needs, Basic Anatomy, Injuries to Bones, Joints and Muscles, First Aid and CPR, HIV/AIDS, Reproduction and STD's. Successful completion of this course is required for graduation.

PRACTICAL ARTS

BUSINESS

ACCOUNTING

This course is designed to help students understand the basic principles of the accounting cycle. Emphasis is placed on analysis and recording the basic principles of the preparation and interpretation of financial statements; accounting systems; banking and payroll activities; basic types of business ownership; and accounting career orientation. Mathematical skills and critical thinking are reinforced.

INTRODUCTION TO BUSINESS/ENTREPRENEURSHIP

This course will familiarize students with the basics of terminology of the business and work world. It will also serve as a background for other business courses in high school, college, or any business training facility. The most relevant business topics to be covered include the role of entrepreneurship in the global economic recovery. Topical data on how to conduct research and the importance of research as part of the entrepreneurship are also covered.

PERSONAL FINANCE

This course is designed to introduce students to various personal finance and practical life skills. Through numerous practical applications students gain knowledge of financial fundamentals; long and short term funding sources; banking institutions; school loans; credit and financial charges; real estate mortgages; car loans; taxes and insurance; health insurance; understanding stocks and the stock market; and saving for the future.

COMPUTER TECHNOLOGY

INTRODUCTION TO COMPUTER APPLICATIONS [7TH GRADE]

This course is designed for students to build on their current computer-literacy levels, learning basic computer operations, computer use in common software programs, hardware basics, internet, and social media safety. Microsoft application skills developed include word processing, PowerPoint presentation software, Excel spreadsheets as well as internet applications. Students will combine text and graphics in a variety of formats to create publications. They will use critical thinking skills to plan projects, solve problems, and make informed decisions using appropriate tools and resources.

INTRODUCTION TO COMPUTER SCIENCE

In this course students will learn the basics of computer programming along with the basics of computer science. The emphasis is on computational thinking and will help students develop their ability to solve complex problems. This course uses code-along videos to build the necessary skills for students to gain a deeper understanding of computer science and programming. The primary language used is Python and students will learn to program basic number calculations, use repetition and loops, program to create graphics, functions, arrays, 2D arrays, with some programming in EarSketch which adds music to their programs.

AP COMPUTER SCIENCE PRINCIPLES

This course introduces students to the five [5] big ideas in computer science. These ideas are the creative aspects of programming, abstractions, algorithms, large data sets, the internet, cybersecurity and how computer impacts our world. This course is project-based using collaborative learning as a tool to address real-world problems. Computational thinking practices developed by students in this course include designing and evaluating solutions for purpose, developing and implementing algorithms, and programs that incorporate abstractions, evaluating and testing algorithms and programs, investigating computing innovations and using responsible computing in a safe, collaborative, and ethical manner.

FAMILY AND CONSUMER SCIENCE

NUTRITION, WELLNESS, AND INDEPENDENT LIVING [10TH, 11TH, 12TH GRADES]

This course prepares students for the future by understanding today's foods and eating trends, learning to evaluate nutritional information to make informed decisions about basic food preparation and food choices for a long and healthy lifestyle. Students will explore personality development and the responsibilities of being a mature person, building communication, and decision-making skills. They will develop strategies for handling family challenges and creating positive relationships. They will learn about managing finances, making housing decisions, family responsibilities, and caring for children in preparation for life after high school.

SCIENCE

GENERAL SCIENCE 7

In this course students are engaged in a comprehensive study of all living things and their environment. Students learn how energy, change over time and stability play a major role in how things function. Students are involved in a variety of activities that will lead to a greater understanding of the world around them. Students begin the year by learning about the scientific method and scientific processes. Students then move on to cell, learning about its composition and functions. The second half of the year focuses on an overview of the organisms that make up this planet. The students end the year by focusing on the human body and its systems.

GENERAL SCIENCE 8

General Science 8 is a comprehensive course that focuses on exploring the individual science disciplines of Chemistry, Physics, and Earth Science. Students review the principles of the Scientific Method as well as Chemistry content, such as Matter and its Properties, heat transfer. Students learn a combination of Chemistry and Physics topics including the Periodic Table, Chemical Reactions/Bonds, Acids and Bases, and Newton's Laws of Motion. Students also focus on both Physics and Earth Science including topics of Pressure, Energy, Simple Machines, Electricity, Weathering, and Erosion. Earth Science topics will include Soil Formation, the Fossil Record, the Rock Cycle, Plate Tectonics, and Volcanism. Throughout the school year students also spend time exploring the links between each of these types of science and real world applications.

GENERAL SCIENCE 9

In this course, students investigate the core of Earth and explore far away planets in a real world comprehensive format. Coursework includes the exploration of the four key content areas that focus on the study of Earth and its place in the universe. The four content areas include geology which is the study of solid Earth including the origin, structure, and processes shaping Earth. The second content area is oceanography which is the study of the Earth's oceans. The third content area is meteorology which is the study of Earth's atmosphere and the fourth content area is astronomy which is the study of the universe beyond Earth. During the year, students learn how this content relates to their lives and real world applications.

BIOLOGY [10TH GRADE]

Biology is a comprehensive course that focuses on the study of life by examining the fundamentals and concepts of Basic Biological Principles, Chemistry of Life, Homeostasis and Transport, Bioenergetics, Cell Growth and Reproduction, Genetics, Ecology, and Evolution. The scientific process and laboratory skills are emphasized along with Biology's connection to other scientific disciplines.

ADVANCED BIOLOGY [11TH-12TH GRADE]

This course is an elective for juniors and seniors. Prerequisite for this course is successful completion of Biology with a grade of at least 90 or above.

The course is a detailed look at the 11 different systems that make up the Human Body. Those systems include: Integumentary, Endocrine, Muscular, Skeletal, Cardiovascular, Nervous, Reproductive, Lymphatic, Urinary, Respiratory and Digestive. Furthermore, the course focuses on the naming of the organs in each system (Anatomy) and how each system functions in the body (Physiology).

CHEMISTRY [11TH -12TH GRADE]

Chemistry is an introductory course for students interested in further study of the sciences. Chemistry focuses on the study of basic principles and theories of chemistry including stoichiometry, atomic and molecular structures, the periodic law and its application, basic concepts of chemical bonding, solutions, types of chemical reactions, and gas laws.

GENERAL SCIENCE 11 [11TH-12THGRADE]

General Science 11 is a comprehensive course that focuses on exploring the individual science disciplines of Biology, Chemistry, Physics, and Earth Science. Students learn about the influence of science and technology in our everyday lives, as well as review the Scientific Method and setting up scientific experiments. Physics topics include Newton's Laws of Motion, Momentum, Heat Transfer, and Electricity and Magnetism. Also included in the course are Biology and Chemistry topics such as Cells, Origin of Life, Atoms and Chemical Formulas. Earth Science topics also include Rocks and Minerals and Plate Tectonics. During the school year, students also explore the areas where each of the scientific disciplines overlap and correlate to their everyday life.

AP CHEMISTRY [12TH GRADE]

Advanced Placement Chemistry is a course designed for those students who have already shown a mastery of basic chemical concepts and calculations from chemistry. It is intended for those who wish to major in a STEM field at the collegiate level. This course provides a more in-depth study of those topics covered in chemistry, such as reactions in aqueous solutions, along with new topics of thermochemistry, atomic and molecular structures, intermolecular forces, acid – base equilibria, chemical kinetics and also an introduction to organic chemistry.

PHYSICS [12TH GRADE]

This course is a science elective for seniors.

It entails the use of some basic trigonometry and extensive use of Algebra I and Real World Problems. Topics studied are: motion, time, position-time graphs, velocity, acceleration, free fall, force and motion, Newton's Laws, scalars, vectors, vectors in 1 dimension, vectors in 2 dimensions, friction, projectile motion, circular motion, relative velocity, planetary motion, gravitation, the law of universal gravitation, rotational motion, rotational dynamics, equilibrium, impulse, momentum, conservation of momentum, energy, work, simple machines, kinetic energy, potential energy, heat energy, temperature, thermodynamics, properties of fluids, periodic motion, and wave properties.

ASTRONOMY [10TH through 12TH GRADES]

This course is an elective course for students in grades 9-12. This course will provide students with a study of the universe and the conditions, properties, and motions of bodies in space. Coursework includes the history of astronomy, gravity, in-depth surveys of planets, exoplanets, and stars, the nature of planetary systems with a focus on our Solar System, as well as the nature and evolution of stars, galaxies and the universe, space exploration, and space technology. The scientific process and research skills are emphasized in this course. This course is designed for students who are curious about the mysteries of the universe. The space program, rocketry, constellations, celestial navigation, life cycle of stars, organization and dynamics of the solar

system, galaxies and their interactions, black holes and the warping of time and space. Students who have taken Space Science may not take Astronomy.

MECHANICAL ENGINEERING [9TH through 12TH GRADES]

This course is an elective course for students in grades 9-12. This course will provide students with an interactive and hands-on experience learning the engineering design process. Students in this course will work through the steps of the engineering method to complete and design projects based on the topics of mechanical engineering. Collaboration and innovation are emphasized in the class. Topics in mechanical engineering include basic principles of physics, engines, electricity, fluid mechanics, electronics, machines, tool production, flight mechanics, and strength of materials. Students learn the skills and tools necessary to completely rebuild a small gas engine and may also learn the basics of home car care. The course is designed for any student interested in learning the skills needed to care for lawn, garden, and automotive equipment. It provides a solid foundation for students seeking further education in mechanical, automotive, or power transportation.

INTRODUCTION TO HYDROPONICS [10TH through 12TH GRADES]

Be part of a new and exciting course at Carbondale Area as well as a global trend into soilless agriculture. Hydroponics utilizes cutting edge technologies married with ancient concepts of agriculture to engage students in career opportunities including farmer, engineer, marketing specialist, advertising representative, conservationist, and biologist just to name a few. Students will maintain the system in order to grow food crops as well as experiment with varying growing techniques and conditions in order to fully interact with the technology.

Introduction to Hydroponics is a course that will introduce students to the field of hydroponics/aeroponics. Students will get hands-on experience growing their own food, including different varieties of lettuce and basil, while also learning how to properly maintain a hydroponic system. Students will also learn about basic plant anatomy, plant nutrition (use of fertilizer), plant disorders, current trends in the industry and types of hydroponic systems and the scientific principles and techniques involved in sustainable agriculture and hydroponic crop production.

SOCIAL STUDIES

The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking, raise questions, and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision making. These skills are developed through the study of significant historical substance from the era or society being studied.

The Social Studies courses are designed to allow students to develop:

Critical Thinking Skills- To include creative thinking, innovation, inquiry, and in-depth analysis of historical information and evidence

Communication Skills- To include effective development, interpretation and expression of ideas through written, oral and visual communications.

Personal Responsibility- To include the ability to connect choices, actions and consequences to ethical and wise decision-making.

Social Responsibility- To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively with fellow peers.

AMERICAN CULTURES I [7TH GRADE]

American Cultures I is a survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-colonial era to the Civil War. American Cultures I examines colonization, the American Revolution, establishment of the Constitution, immigration and expansion of the nation, the War of 1812, and the events leading up to and during the Civil War. Themes that are covered in American Cultures I include: American culture, civil and political rights, technological change, economic change, immigration and migration, the formation and growth of the federal government, and the study of U.S. foreign and domestic policy throughout the period up to and including the Civil War.

AMERICAN CULTURES II [8TH GRADE]

American Cultures II surveys of the social, political, economic, cultural, and intellectual history of the United States from the Reconstruction era to the present. American Cultures II examines industrialization, immigration, world wars, the Great Depression, the Vietnam conflict, the Cold War and post-Cold War eras. Themes that are covered in American Cultures II include: American culture, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy throughout the years of 1865 - present.

CIVICS [9TH GRADE]

This class is designed to acquaint students with the origins, concepts, organizations, and policies of the United States government and political system. This course is an introduction to the basic concepts of American government, the American political process and the rights and responsibilities associated with United States citizenship. Students explore and examine the following: Founding Documents and the Origins of United States Government; Political Parties, Elections, and Voting; The Legislative and Executive Branches of Government; State and Local Government; and the American Legal System.

WORLD CULTURES I [10TH GRADE]

World Cultures I course covers history from pre-history to 1500 A.D. and is designed to introduce the student to the concepts of culture in human experience and the concepts of

geography. What culture is, how it develops, how it changes, and how it is transferred in time and space, its power to influence our lives and events, are some of the main topics examined. Because of the substantial influence of religion on human cultures and history, understanding major world religions will also be a focus of the course. Also, such topics as the role of family, language, art, political ideologies, government types, gender roles, work, status and war, are also examined.

WORLD CULTURES II [11TH GRADE]

World Cultures II is designed to give students a better understanding of world politics, wars, events, and rulers who sought to dominate the world. Students focus on how people in the past grappled with issues such as truth, justice, social and individual responsibilities. Students analyze the impact of geographical factors on the development of human and social systems, evaluate the influence of major religious and political belief systems, and analyze the major political, economic, and social developments that have shaped the history of our contemporary world. Topics include: The Age of Absolute Monarchs, The Enlightenment, The French Revolution, The Industrial Revolution, Revolutions of Latin America and Europe, Nationalism, Imperialism, World War I and its Aftermath, The Russian Revolution, The World between the Wars, World War II and its Aftermath, and the contemporary world since 1945.

STREET LAW/ECONOMICS [11TH-12TH GRADE]

The *Street Law* portion of this course is an introduction to law and legal systems of the United States. The major focal points of this course include constitutional law, general legal principles, civil and criminal law, the courts, court procedures, and civil rights. Additional topics may include family law, housing law, and consumer law. Students engage in real-world experiences to deepen their personal understanding of government, individual rights, the legal system, and legal disputes. These learning experiences are characterized using case studies, mock trials, contemporary issues, current events, and legal research and applied to students' everyday lives. The *Economics* portion of the course will give the students a greater understanding of economics ranging from the viewpoint of the individual consumer or small business owner to the global economy. The course will study the law of supply and demand, forms of business, labor unions, government finances and influence on the economy, money and prices, inflation, and deflation cycles. The course relates history and politics to the study of economics.

PSYCHOLOGY [11TH-12TH - GRADE]

The *Psychology* portion of this course will trace the history of psychology and examine key psychological theories. Students will discuss and examine human development and explain how the nervous and endocrine systems affect human development and behavior. Various theories related to language development and acquisition will be explored along with the influence of heredity, environment, society, and culture on human behavior.

SOCIOLOGY [11TH-12TH - GRADE]

The *Sociology* portion of this course will focus on the examination of how people's beliefs, values, and behavior affect the people and world in which we live, especially as the world continues to become more complex. In their increasingly connected world, students will further examine problems in our society and learn how human relationships can influence the life of the student and those around them.

AP AMERICAN HISTORY [12TH GRADE]

This Advanced Placement course is designed to study the history of the United States chronologically, with emphasis on interpretation and analysis of the material by contemporary and modern historians. Through the use of primary and secondary sources the student not only acquires a basic understanding of the factual material but develops the analytical and interpretive skills necessary to deal with the subject in greater depth. At the end of the course, students will be given the opportunity to take the Advanced Placement Examination in American History.

WORLD LANGUAGES

SPANISH

SPANISH I

This course is an introduction to the Spanish language. It provides basic understanding of the Spanish language and culture through reading, writing, speaking and listening. Students focus on pronunciation, basic vocabulary (including school, city and family vocabulary) and simple grammatical structures. To begin to develop the ability to communicate effectively in Spanish, students work together with partners or small groups to develop basic conversations and ask/answer questions. Students are introduced to the Spanish-speaking countries, their holidays and customs. They also look at Puerto Rico and the countries of Mexico and the Dominican Republic more extensively.

SPANISH II

This course reinforces and builds upon the knowledge gained in Spanish I through reading, writing, speaking and listening. While continuing to focus on pronunciation and constructing grammatically correct sentences and questions, students are introduced to a more extensive vocabulary (including pastimes, celebrations, house and chores, weather and food vocabulary). To further develop the students' ability to communicate effectively in Spanish, students begin to look at more complex grammatical structures and continue to work together to converse and practice their listening and speaking skills. Students are required to present brief reports in Spanish as well as construct written reports in Spanish using the appropriate vocabulary and grammatical structures. Students continue to explore the customs of Spanish-speaking countries with a focus on the countries of Costa Rica, Nicaragua, Venezuela, Colombia, Argentina and Chile.

SPANISH III

This course continues to reinforce and build upon the knowledge gained in Spanish I and Spanish II through reading, writing, speaking and listening. While continuing to focus on pronunciation and constructing grammatically correct sentences and questions, students expand upon their extensive vocabulary (including clothing, vacation, technology, daily routine, city, shopping and animals vocabulary). Students develop their knowledge and usage of more complex grammatical structures. To further enhance the students' ability to communicate effectively in Spanish, students learn to use a wide variety of verb tenses in their speaking and writing and continue to work together to converse and practice their listening and speaking skills. Students continue to explore the customs of Spanish-speaking countries with a focus on the

countries of Mexico, El Salvador, Honduras, Cuba and Puerto Rico. Students explore the history of the Kuna Indians and their artwork “Las Molas” as well as the artwork of Mexican artists.

SPANISH IV

This course continues to reinforce and build upon the knowledge gained in Spanish I, II, and III through reading, writing, speaking and listening. While continuing to focus on pronunciation and constructing grammatically correct sentences and questions, students expand upon their extensive vocabulary (including supermarket, clothing store, extended house, rules, news and airport vocabulary). To further enhance the students’ ability to communicate effectively in Spanish, students expand their knowledge and usage of more advanced grammatical structures, continue to use a wide variety of verb tenses in their speaking and writing, and continue to work together to converse and practice their listening and speaking skills. Students explore the customs of Spanish-speaking countries with a focus on the countries of Spain, Paraguay, Uruguay, Bolivia, Colombia and Ecuador.

FRENCH

FRENCH I

This course is an introduction to the French language. It concentrates on the fundamentals of the French language and culture through reading, writing, speaking, and listening comprehension. To develop basic communication skills for written and spoken French, students learn foundational vocabulary, verb conjugation, and grammatical structures. In addition, students practice pronunciation through aural/oral repetition and construct basic communicative responses to questions. Students will begin the study of the French and Francophone culture.

FRENCH II

This course builds upon knowledge and skills acquired in French I to move students toward developing greater fluency in speaking and writing the French language. Students acquire more extensive vocabulary and more complex grammatical structures to enhance their ability to communicate effectively in spoken and written French. In addition, this course continues to integrate reading and listening activities to reinforce students’ knowledge and understanding of acquired vocabulary and sentence patterns and improve their ability to appropriately translate and comprehend written and spoken French. Students continue to practice pronunciation through aural/oral repetition and construct communicative responses to more involved questions, as well as gain increased understanding of the French and Francophone culture.

FRENCH III

This course continues to reinforce and build upon the knowledge and skills acquired in French I and II through reading, writing, speaking, and listening comprehension. To advance the students’ ability to communicate effectively in French, students continue to acquire and apply common and specialized vocabulary and phrases, as well as complex grammatical constructions. Likewise, they initiate and respond appropriately to increasingly involved conversations to demonstrate greater fluency in speaking and writing. Reading and listening skills also advance to the intermediate level to demonstrate an increased knowledge and understanding of the French language. Students further deepen their study of the French and Francophone culture with analysis and comparison of distinct customs and perspective