

Magnolia High School

Course Descriptions

2017-2018

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*These are the tentative course offerings. Course will be scheduled depending upon enrollment and staffing. Students wishing to enroll in honors, AP or college courses may need teacher recommendation and additional assessments.

ENGLISH LANGUAGE ARTS

English Language 9: *ENG LA 9 400900*

Grade 9

Advanced Academics English Language 9: *AA ENG LA 9 40090H*

1 credit/2 semesters

English Language Arts ninth grade students continue to develop in literacy-rich environments as independent motivated readers and writers who think critically and take responsibility for their learning. They integrate and apply reading, writing, speaking, listening and the conventions of language across curriculums. They actively participate in inquiry based, student driven, engaging endeavors and collaborative learning situations to facilitate motivation and the foundation for lifelong learning. Frequent collaboration with peers and adults and analysis of a broad array of quality literary and informational texts of appropriate complexity, with increasing emphasis on informational text, create independent and proficient readers and communicators with an understanding of widely divergent cultures and experiences. Students use the writing process and the conventions of language to integrate information into text selectively to maintain the flow of ideas and avoid plagiarism by using standard citation. With increasing emphasis on informative/explanatory and argumentative writing and speaking, students conduct short as well as more sustained research projects to solve a problem and explore multiple avenues to support a research topic, analysis and/or reflection. They assess the authority and synthesize multiple print and digital sources.

English Language 10: *ENG LA 10 401000*

Grade 10

Advanced Academics English Language 10: *AA ENG LA 10 40100H*

1 credit/2 semesters

English Language Arts tenth grade students become more adept at making connections and transferring knowledge to new situations through research and writing in literacy-rich environments. They continue to develop as independent motivated readers and writers who analyze impact of and take responsibility for their learning. They analyze, defend and support views using reading, writing, speaking, listening and the conventions of language across curriculums. They collaboratively participate in inquiry based, student driven, engaging endeavors that facilitate motivation and the foundation for lifelong learning. Thorough analysis of a broad array of quality literary and informational texts of appropriate complexity, with increasing emphasis on informational text, creates independent and proficient readers and communicators who appropriately initiate and discuss issues with widely divergent cultures. Students use technology to strengthen writing and use the writing process and the conventions of language to compose logical arguments and explanations with proper tone and form one or more points of view and present information and findings with clear and distinct perspective and style. They conduct short as well as more sustained research projects to solve a problem and explore multiple avenues to support a research topic, analysis and/or reflection. They avoid plagiarism, assess the authority and synthesize multiple print and digital sources in terms of task, purpose and audience.

English Language 11: *ENG LA 11 401100*

Grade 11

1 credit/2 semesters

English Language Arts eleventh grade students become adept at analyzing, reading, and evaluating in order to make connections and transfer knowledge in a literacy-rich environment. They focus on reading, writing, speaking, listening, and conventions of language across curriculums in educational endeavors in collaborative learning situations. They initiate and participate in collaborative discussions, stimulate thoughtful exchange of ideas, and evaluate speaker's reasoning, tone, and point of view. They analyze a variety of genres including, but not limited to Seventeenth-, Eighteenth-, and Nineteenth-Century foundational texts, poetry, and dramas. They analyze a broad array of quality literary and informational texts of appropriate complexity to create independent and proficient readers who appropriately analyze and discuss the effects of cultural experiences with diverse audiences. They conduct short as well as more sustained research projects to solve a problem, assess the strength and limitations of sources, synthesize multiple print and digital sources, and use this research to cite strong and thorough evidences to support their analysis of the literary text. They draw inferences and determine central ideas based on literary text. Students focus on informational, explanatory, and argumentative writing where they will work through the stages of writing learning how to analyze the topic, use valid reasoning, and use sufficient evidence to create a well-developed, organized, and coherent essay, while using technology to strengthen approaches in writing. They will read, analyze, and evaluate literary texts to determine an author's effectiveness and the use of connotations to establish this effectiveness. They will determine the meaning of words and phrases used in a literary text including connotations and figurative language to make connections with the text and assist with determining multiple word meanings.

OR

AP English Language and Composition: *AP ENG LANG 404100*
1 credit/2semesters

Grade 11

Students will be expected to analyze reading and be required to work among different genres of readings (American literature, memoir, fiction, and non-fiction) to understand the purpose of these readings within culture, evaluate and assess how an author exams themes, determine a text for meaning, and be able to deconstruct the passages through literary analysis utilizing the literary STEMS that will be provided to them in order to answer multiple choice questions and analyze the passages. Students will use the SOAPStone strategy to read and annotate passages in order to determine the main idea, thesis, argument, topic, rhetorical strategy, author's style, story elements, theme, and will be instructed to ask questions of the text to help with deconstruction of the passages. They will analyze the use of rhetoric and rhetorical devices and how these devices are used based on language to demonstrate the/an argument. Students will write with logical organization by using transitions, graphic organizers, and repetition while using varied sentence structure, including appropriate use of subordination and coordination, use a wide variety of vocabulary in an effective manner, use specific detail for mature writing to demonstrate thorough understanding of material analyzed, and use rhetoric effectively as to maintain and identify tone, voice, and proper diction within their speaking and writing. They will cite sources using the Modern Language Association (MLA) format and demonstrate the use of research skills and demonstrate the ability to evaluate, use, and cite primary and secondary sources. Students will write in informal texts by writing journal entries, complete bell ringers, quick writes, use collaborative writing, and imitation exercises to become increasingly aware of their writing and the writers they read about. They write in several forms (narrative, expository,

analytical, and argumentative) essays in regards to a variety of subjects and be able to demonstrate a well-written position and point of view and cite evidence to support the argument and be able to write within time constraints.

English Language 12: *ENG LA 12 401200*

Grade 12

1 credit/2semesters

English Language Arts twelfth grade students are College and Career Ready. They make connections, transfer knowledge to new situations through research and writing, and understand the value of literacy-rich environments. They set clear goals, deadlines and individual roles to promote civil, democratic discussions that probe reasoning, evidence and divergent and creative thinking. They use research to make informed decisions and solve problems independently. They analyze and articulate the value of and take responsibility for their learning. They focus on reading, writing, speaking, listening and the conventions of language across curriculums in educational endeavors and collaborative learning situations including complex, critical analysis and evaluation of how texts and ideas interact as well as how and why author's craft impacts the quality and aesthetic value of texts. They initiate and facilitate inquiry based, engaging endeavors and understands that this is the foundation for lifelong learning. Complex analysis of a broad array of quality literary and informational texts of appropriate complexity, with increasing emphasis on informational text, creates independent and proficient readers and communicators who convey a clear and distinct perspective and address alternative or opposing perspectives with diverse audiences. Students use technology to develop and strengthen writing in response to ongoing feedback, including new arguments or information and recognize the benefit of the sustained writing process. With increased emphasis on informational/explanatory and argumentative writing, they use the writing process and the conventions of language to compose logical arguments and explanations using rhetorical devices, varied syntax and relevant evidence anticipating the audience's values and biases. Through academic rigor and relevance, the ability to evaluate, speak and write logically, clearly and distinctly are evident. They effectively evaluate and use multiple sources following standard format for citation in sustained research projects that include the premises, purposes and arguments in works of public advocacy. The 21st Century student adeptly employs technology best suited to audience, task, purpose and discipline. Using higher order thinking skills, communication skills and independent and creative thinking, students effectively build content knowledge.

OR

Transition English Language Arts for Seniors: *TRNS E/LA SR 401300*

Grade 12

1 credit/2semesters

This course may be required for those not meeting benchmark on the COMPASS test. English Language Arts twelfth grade students are College and Career Ready. They make connections, transfer knowledge to new situations through research and writing, and understand the value of literacy-rich environments. They set clear goals, deadlines and individual roles to promote civil, democratic discussions that probe reasoning, evidence and divergent and creative thinking. They use research to make informed decisions and solve problems independently. They analyze and articulate the value of and take responsibility for their learning. They focus on

reading, writing, speaking, listening and the conventions of language across curriculums in educational endeavors and collaborative learning situations including complex, critical analysis and evaluation of how texts and ideas interact as well as how and why author's craft impacts the quality and aesthetic value of texts. They initiate and facilitate inquiry based, engaging endeavors and understands that this is the foundation for lifelong learning. Complex analysis of a broad array of quality literary and informational texts of appropriate complexity, with increasing emphasis on informational text, creates independent and proficient readers and communicators who convey a clear and distinct perspective and address alternative or opposing perspectives with diverse audiences. Students use technology to develop and strengthen writing in response to ongoing feedback, including new arguments or information and recognize the benefit of the sustained writing process. With increased emphasis on informational/explanatory and argumentative writing, they use the writing process and the conventions of language to compose logical arguments and explanations using rhetorical devices, varied syntax and relevant evidence anticipating the audience's values and biases. Through academic rigor and relevance, the ability to evaluate, speak and write logically, clearly and distinctly are evident. They effectively evaluate and use multiple sources following standard format for citation in sustained research projects that include the premises, purposes and arguments in works of public advocacy. The 21st Century student adeptly employs technology best suited to audience, task, purpose and discipline. Using higher order thinking skills, communication skills and independent and creative thinking, students effectively build content knowledge.

OR

College English: *COLLEGE ENGLISH 40120X*

Grade 12

1 credit/2semesters

A college freshman level composition course through WVNCC and taught at Magnolia High School. Part of this course will be online and part will be with current staff. Students must have qualifying scores on the ACT or ACCUPLACER. The required scores are ACT: Reading 17 and English 18. The ACCUPLACER test will be administered on site and a score given immediately. The cost of this course is \$25 per credit hour. English Language Arts twelfth grade students are College and Career Ready. They make connections, transfer knowledge to new situations through research and writing, and understand the value of literacy-rich environments. They set clear goals, deadlines and individual roles to promote civil, democratic discussions that probe reasoning, evidence and divergent and creative thinking. They use research to make informed decisions and solve problems independently. They analyze and articulate the value of and take responsibility for their learning. They focus on reading, writing, speaking, listening and the conventions of language across curriculums in educational endeavors and collaborative learning situations including complex, critical analysis and evaluation of how texts and ideas interact as well as how and why author's craft impacts the quality and aesthetic value of texts. They initiate and facilitate inquiry based, engaging endeavors and understands that this is the foundation for lifelong learning. Complex analysis of a broad array of quality literary and informational texts of appropriate complexity, with increasing emphasis on informational text, creates independent and proficient readers and communicators who convey a clear and distinct perspective and address alternative or opposing perspectives with diverse audiences. Students use technology to develop and strengthen writing in response to ongoing feedback, including new arguments or information and recognize the benefit of the sustained writing process. With

increased emphasis on informational/explanatory and argumentative writing, they use the writing process and the conventions of language to compose logical arguments and explanations using rhetorical devices, varied syntax and relevant evidence anticipating the audience's values and biases. Through academic rigor and relevance, the ability to evaluate, speak and write logically, clearly and distinctly are evident. They effectively evaluate and use multiple sources following standard format for citation in sustained research projects that include the premises, purposes and arguments in works of public advocacy.

Read 180:

Grades 9-12

1 credit/2semesters

READ 180 is a reading intervention program in use by students in Grades 9–12 who read at least two years below grade level. **READ 180** is based on a blended instructional model that includes whole-group instruction and three small-group rotations, adaptive software, differentiated instruction, and independent reading. The Scholastic Reading Inventory (SRI) is a technology-based universal screener and progress monitor. SRI is used to generate a Lexile, or readability level, for each student. The purpose of administering the SRI is to determine if the student is a candidate for intervention. SRI is software that “assesses students’ reading levels, tracks students’ growth over time, and helps guide instruction according to students’ needs.” **Students may be required to take this course in addition to the grade level English course.*

ENGLISH ELECTIVES

These cannot be substituted for any of the above English courses.

Creative Writing: CRTV WRIT I 402200

Grades 9-12

1 credit/2 semester

Creative writing courses emphasize prose and poetic forms of writing that express the writer's thoughts and feelings. Metaphorical language and relational thought are evident in the writing. Writings are based more on fiction than factual and logical progression of ideas.

Journalism: JRNLSM 405100

Grades 10-12

1 credit/2semesters

Students will write the school newsletter. They will devise and develop articles, interview faculty, staff, and their peers, and seek out information to enhance and augment the Magnolia lifestyle and experience. Students interested in taking this class must be able to question other students and faculty members. They must be able to write clearly and effectively and spell correctly. They must have reasonable word processing skills.

Literature (Drama): LITERATURE DR 413600

Grades 10-12

.5 credit/1 semester

This class will concentrate on plays by a variety of playwrights from different countries. Students will focus on the appreciation of dramatic literature. Students will learn to identify: the elements of dramatic structure, varieties of drama, terms related to the dramatic form and classic works and playwrights.

Literature (Novel): LITERATURE NV 413700

Grades 10-12

.5 credit/1 semester

This class will concentrate on novels by a variety of authors from different countries. Students will focus on the appreciation of literature through novels and will learn to identify: the elements of a novel, varieties of novels, terms related to the novel form, and classic works and novelists.

Speech: *SPCH/ORL COM 407600*

Grades 11-12

1 credit/2semesters

This course prepares students for a variety of academic and other situations in which formal presentations are required. Topics will include cultural conventions and speech, perceptions of others, verbal and nonverbal messages, and techniques of oral presentation and persuasion. Students will learn how to research, outline, and deliver short, informal presentations as well as longer speeches.

College Speech: *SPCH/ORL COM 40760X*

Grades 11-12

.5 credit/1 semester

This class is a practical course designed to offer the novice speaker a number of opportunities to organize and prepare public speaking assignments. The course will also offer a “laboratory setting” where the beginning speaker can actually stand in front of a live audience and present his/her practiced performance. In addition to public speaking, further performance opportunities may be included in the area of public oral reading. Students will learn about the role of communication in our lives, the communication model, spatial relationships, delivery styles, and the effectiveness of language, gestures, and organization techniques. This course prepares students for a variety of academic and other situations in which formal presentations are required. Topics will include cultural conventions and speech, perceptions of others, verbal and nonverbal messages, and techniques of oral presentation and persuasion. Students will learn how to research, outline, and deliver short, informal presentations as well as longer speeches.

MATHEMATICS

CCR Algebra I *CCR ALG I 306100*

Grade 9

Advanced Academics CCR Algebra I AA *CCR ALG I 30610H*

1 credit/2semesters

Students in this course will focus on five critical units that deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. Mathematical habits of mind, which should be integrated in these content areas, include: making sense of problems and persevering in solving them, reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling with mathematics; using appropriate tools strategically; attending to precision, looking for and making use of structure; and looking for and expressing regularity in repeated reasoning. Students will continue developing mathematical proficiency in a developmentally-appropriate progressions of standards.

Math II: MATH II 301400**Grade 10****Advanced Academics Math II: AA MATH II 30140H** (must be taken concurrently with STEM Readiness Math)

1 credit/2semesters

The focus of Mathematics II is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics I as organized into six critical areas, or units. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, round out the course. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful and logical subject that makes use of their ability to make sense of problem situations.

STEM Readiness Mathematics: STEM READY MTH 302600**Grade 10**

1 credit/2 semesters

High School STEM Readiness Mathematics – taken concurrently with Honors Math II. This course is designed for students who are pursuing a STEM career. It includes standards that will be covered in Math III (STEM) but gives the student a jump start on those standards so more can be covered in Math III (STEM). For standards taught, see Math III (STEM) description.

Math III (LA) Liberal Arts: MATH III (LA) 301500**Grade 11**

1 credit/2semesters

It is in Mathematics III that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into four critical areas, organized into units. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial, rational and radical functions. They expand their study of right triangle trigonometry to include general triangles. Finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. The Mathematical Practice Standards apply throughout each course and together with the content standards, prescribe that students experience mathematics as a coherent, useful and logical subject that makes use of their ability to make sense of problem situations.

OR**Math III (TR) Technical Readiness: MATH III (TR) 301700****Grade 11**

1 credit/2semesters

It is in Mathematics III that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into four critical areas, organized into units. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial,

rational and radical functions. They expand their study of right triangle trigonometry to include general triangles. Finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. The Mathematical Practice Standards apply throughout each course and together with the content standards, prescribe that students experience mathematics as a coherent, useful and logical subject that makes use of their ability to make sense of problem situations.

OR

Math III/IV (STEM): *MATH III (STEM) 301600* and *Math IV 301800*

Grade 11

2 credits/2semesters

It is in Mathematics III that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into four critical areas, organized into units. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial, rational and radical functions. They expand their study of right triangle trigonometry to include general triangles. Finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. The Mathematical Practice Standards apply throughout each course and together with the content standards, prescribe that students experience mathematics as a coherent, useful and logical subject that makes use of their ability to make sense of problem situations. If a student wants to take AP Calculus as a senior, they must take Math III (STEM) and Math IV (STEM) at the same time.

Math IV (LA): *MATH IV 301800*

Grade 12

1 credit/2semesters

The fundamental purpose of Mathematics IV is to generalize and abstract learning accumulated through previous courses and to provide the final springboard to calculus. Students take an extensive look at the relationships among complex numbers, vectors, and matrices. They build on their understanding of functions, analyze rational functions using an intuitive approach to limits and synthesize functions by considering compositions and inverses. Students expand their work with trigonometric functions and their inverses and complete the study of the conic sections begun in Mathematics II. They enhance their understanding of probability by considering probability distributions. Previous experiences with series are augmented. High School Math IV is appropriate for those students that complete Math III STEM and Math III LA.

OR

Math IV (TR) Technical Readiness: *MATH IV (TR) 301900*

Grade 12

1 credit/2semesters

You must have taken Math III (TR) to enroll in this course. The fundamental purpose of Mathematics IV is to generalize and abstract learning accumulated through previous courses and to provide the final springboard to calculus. Students take an extensive look at the relationships among complex numbers, vectors, and matrices. They build on their understanding of functions, analyze rational functions using an intuitive approach to limits and synthesize functions by considering compositions and inverses. Students expand their work with trigonometric functions and their inverses and complete the study of the conic sections begun in Mathematics II. They

enhance their understanding of probability by considering probability distributions. Previous experiences with series are augmented.

OR

Transition Math for Seniors: *TRANS MATH SRS 305200*

Grade 12

1 credit/2semesters

This course may be required if you did not meet benchmark in the 11th grade. Transitional Math for Seniors prepares students for their entry-level credit-bearing liberal studies mathematics course at the post-secondary level. This course will solidify their quantitative literacy by enhancing numeracy and problem solving skills as they investigate and use the fundamental concepts of algebra, geometry, and introductory trigonometry. This course is not accepted by the NCAA.

OR

AP Calculus: *AP CALC AB 303100*

Grade 12

1 credit/2semesters

Calculus objectives are designed for students who have completed Math I, Math II, Math III and Math IV. Study includes functions and continuity, limits, differentiation and applications of derivatives, integration and its application to area, volume, and displacement. The Rule of Four (Numerical, Analytical, Graphical and Verbal) will be applied throughout the course. Available technology will be used by students and teachers to enhance learning. Graphing utilities will be used to investigate concepts and to evaluate derivatives and integrals. Students may be required to take the AP exam.

MATH ELECTIVES

College Algebra: *COLLEGE ALGEBRA 30410X*

Grade 12

.5 credit/1 semesters

A college freshman level algebra course through WVNCC and taught at Magnolia High School. Part of this course will be online and part will be with current staff. Students must have qualifying scores on the ACT or ACCUPLACER test. The required scores are ACT: Math 19 or a passing score on the ACCUPLACER test. The cost of this course is \$25 per credit hour. This course is a study of college algebra with emphasis on the mathematical concepts needed by students of business, social science and biology. The course includes a review of arithmetic and basic algebra, the real number system, functions and their graphs, the mathematics of finance, matrices, linear systems and linear programming. A graphing calculator is needed for this course.

Probability & Statistics: *PROB & STAT 304700*

Grade 12

1 credit/2semesters

The student uses basic rules of counting and probability to analyze and evaluate risk and return in the context of everyday situations. Students continue to develop their understanding of probability concepts through experiments and simulations, using technology where appropriate. The student makes decisions based on understanding, analysis and critique of reported statistical

information and summaries. Statistical methods are applied to design and conduct a study that addresses one or more particular questions. The student communicates the results of reported and student-generated statistical studies. This course cannot take the place of a 4th math credit only a math elective.

SCIENCE

Earth and Space Science: *EARTH SC 620100*

Grade 9

Advanced Academics Earth and Space Science: *AA EARTH SC 62010H*

1 credit/2semesters

The ninth grade Earth and Space Science (ESS) course builds upon science concepts from middle school by revealing the complexity of Earth's interacting systems, evaluating and using current data to explain Earth's place in the universe and enabling students to relate Earth Science to many aspect of human society. Disciplinary core ideas, science and engineering practices, and crosscutting concepts are intertwined as students focus on five ESS content topics: Space Systems, History of Earth, Earth's Systems, Weather and Climate, and Human Sustainability. The objectives strongly reflect the many societally relevant aspects of ESS (resources, hazards, environmental impacts) with an emphasis on using engineering and technology concepts to design solutions to challenges facing human society. Engineering, Technology, and the Application of Science objectives are integrated throughout instruction as students define problems and design solutions related to the course objectives. There is a focus on several scientific practices which include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, constructing explanations and designing solutions. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Safety instruction is integrated in all activities, and students will implement safe procedures and practices when manipulating equipment, materials, organisms, and models.

Biology: *BIOLOGY 602100*

Grade 10

Advanced Academics Biology: *AA BIOLOGY 60210H*

1 credit/2semesters

Biology is a course designed for students who desire a broader, in-depth study of the content found in many biological fields of endeavor. This course is designed to build upon and extend the Biology concepts, skills, and knowledge from the science program, using skills for the 21st Century. Students will explore occupational opportunities in health, engineering, and technology and evaluate the required academic preparations while expanding laboratory skills and experiences. Students will engage in active inquiries, investigations, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills.

OR

AP Biology: *AP BIOLOGY 612100*

Grade 10

1 credit/2semesters

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following

topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

Physical Science: *PHYSSCI 601100*

Grades 11-12

1 credit/2semesters

The Physical Science course develops understandings of the core concepts from chemistry and physics: Structure and Properties of Matter; Chemical Reactions; Forces and Interactions; Energy; and Waves and Electromagnetic Radiation. The objectives in Physical Science allow high school students to explain more in-depth phenomena central not only to the physical sciences, but to life and earth and space sciences, as well. These objectives blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing useable knowledge to explain ideas across the science disciplines. There is a focus on several scientific practices which include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations. Students are expected to use these practices to demonstrate understanding of the core ideas as well as demonstrate understanding of several engineering practices, including design and evaluation. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Safety instruction is integrated in all activities, and students will implement safe procedures and practices when manipulating equipment, materials, organisms, and models.

Forensic Science: *FORENSIC SCI 604400*

Grades 11-12

1 credit/2semesters

Forensic Science is an advanced, high school elective course designed to provide students with hands-on experiences in various aspects of a criminal investigation. Science content and Engineering, Technology, and the Application of Science objectives are integrated as students ask questions and define problems, develop and use models, plan and conduct investigations, analyze and interpret data, construct explanations and design solutions as they consider crime scenes, evidence, and protocol. As students demonstrate proficiency in evidence collection--maintenance of data integrity, formulation of a conclusion/summary, and succinct communication of findings--they prepare for forensic-related careers and other occupational opportunities in science, technology, engineering, and math. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Safety instruction is integrated in all activities, and students will implement safe procedures and practices when manipulating equipment, materials, organisms, and models.

Chemistry: *CHEMISTRY 603100*

Grades 11-12

1 credit/2semesters

Chemistry is an advanced elective course designed for students pursuing Science Technology Engineering Mathematics (STEM) education and careers. Students will develop a deeper understanding of the core concepts of: Structure and Properties of Matter and Chemical Reactions as they prepare for college chemistry requiring a strong mathematical foundation. The chemistry course prepares high school students to explain more in-depth phenomena central not

only to the physical sciences, but to life and earth and space sciences as well. The chemistry objectives blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing useable knowledge to explain ideas across the science disciplines. There is a focus on several scientific practices which include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations. Students will use these practices to demonstrate understanding of the core ideas as well as demonstrate understanding of several engineering practices, including design and evaluation. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Safety instruction is integrated in all activities, and students will implement safe procedures and practices when manipulating equipment, materials, organisms, and models.

AP Chemistry: *AP CHEM 632100*

Grades 11-12

1 credit/2semesters

Pre-requisite: Chemistry

Students will learn fundamental analytical skills to logically assess chemical problems proficiently. Through fascinating and elaborative lessons, students will develop the skills necessary to arrive at conclusions based on informed judgment and present evidence in clear and persuasive essays. Students may be required to take the AP exam.

Human Anatomy & Physiology: *HMN ANAT 610300*

Grade 12

1 credit/2semesters

Human Anatomy and Physiology is an advanced course that is an elective designed for those students wanting a deeper understanding of the structure and function of the human body. The body will be viewed as a whole using anatomical terminology necessary to describe location. Focus will be at both micro and macro levels reviewing cellular functions, biochemical processes, tissue interactions, organ systems and the interaction of those systems as it relates to the human organism. Systems covered include integumentary, skeletal, muscular, respiratory, circulatory, digestive, excretory, reproductive immunological, nervous and endocrine. This course will develop 21st century skills and be appropriate for college bound students as well as those choosing a health services career cluster. Students will engage in active inquiries, investigation, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills as they evaluate the academic requirements and prepare for occupational opportunities in health and medical fields. Safety instruction is integrated into all activities.

Physics: *PHYSICS 604100*

Grade 12

1 credit/2semesters

Physics is an advanced elective course designed for students pursuing Science Technology Engineering Mathematics (STEM) education and careers. The course emphasizes a mathematical approach to the topics of Forces and Interactions; Energy, and Waves and Electromagnetic Radiation and prepares student for college physics. The physics course prepares high school students to explain more in-depth phenomena central not only to the physical sciences, but to life and earth and space sciences, as well. These objectives blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing useable knowledge to explain ideas across the science disciplines. There is a focus on several scientific practices which include developing and using models, planning and conducting investigations,

analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations. Students will use these practices to demonstrate understanding of the core ideas as well as demonstrate understanding of several engineering practices, including design and evaluation. Students will engage in active inquiries, investigations, and hands-on activities as they develop and demonstrate conceptual understandings and research and laboratory skills described in the objectives. Safety instruction is integrated in all activities, and students will implement safe procedures and practices when manipulating equipment, materials, organisms, and models.

SOCIAL STUDIES

World History: *WRLD STUDIES 701000*

Grade 9

Advanced Academics World History: *AA WRLD STUDIES 70100H*

1 credit/2semesters

Ninth Grade World Studies engages students in the study of development and evolution of the historic, economic, geographic, political and social structure of the cultural regions of the world from the dawn of civilization to the Twentieth Century. Special attention is given to the formation and evolution of societies into complex political and economic systems. Students are engaged in critical thinking and problem-solving skills, using maps, spreadsheets, charts, graphs, text and other data from a variety of credible sources. Students synthesize the information to predict events and anticipate outcomes as history evolves through the ages.

US Studies: *US STUDIES 700900*

Grade 10

Advanced Academics US Studies: *AA US STUDIES 70090H*

1 credit/2semesters

Tenth Grade United States Studies examines the evolution of the Constitution as a living document and the role of participatory democracy in the development of a rapidly changing technological society. This study of the United States is an examination of the formative years from the colonization of what would be the United States to its transformation as a dominant political and economic influence in the world at the beginning of the twentieth century. Special emphasis is placed on how the challenges of settling expansive and diverse physical environments were met by a culturally diverse population.

Contemporary Studies: *CONTEMP STDS 701100*

Grade 11

1 credit/2semesters

Eleventh Grade Contemporary Studies examines the interactions between the United States and the world since 1914 to present day. Teachers will engage students in critical thinking and problem-solving skills as students learn and work with factual historical content, geography, civics, economics and other social studies concepts. Maps, spreadsheets, charts, photographs, the arts, music, graphs, primary source documents, textbooks and data from a variety of credible electronic and non-electronic sources will be used to synthesize, analyze, interpret and predict outcomes. Careful analysis of the interactions of the United States and other nation states will help students recognize the interdependencies of the United States and other countries as the concept of globalization is explored and evaluated. Teachers will provide a venue for students to examine factors that influence changing political and economic relationships and foreign policies between the United States and its world neighbors. The impact of world events on the individual

citizen and the reciprocal impact of an individual citizen's actions, in the democratic process, on world events will be emphasized.

OR

AP US History: *AP US HSTRY 704600*

Grade 11

1 credit/2semesters

The AP U.S. History course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S. history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. It also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth.

Civics for Next Generation: *CIVIC NXT GEN 703100*

Grade 12

1 credit/2semesters

Civics is designed as a culminating history class that fosters informed citizens essential to the perpetuation of the American Republic. Students learn and utilize knowledge and skills for responsible, participatory citizenship based on a firm understanding of the principles and practices of our government coupled with civil rights and responsibilities, sound financial literacy and global awareness. Students investigate what has happened, explore what is happening and predict what will happen with the social, political and economic problems that beset America and the world using the skills and resources of the past centuries and the present. Students continue to develop their critical thinking and problem-solving skills collaboratively and independently to become informed citizens and consumers who practice economically sound decision-making, are geographically aware of physical and human landscapes of the world, and protect, preserve and defend their system of government. New and refined knowledge gained in Civics for the Next Generation is communicated and shared throughout the community as students engage in community service and service-learning that makes classrooms span continents and serve as the heart of the community.

OR

AP Government & Politics: *AP GV/PL-US 704400*

Grade 12

1 credit/2semesters

Students may be required to take the AP exam. The AP U.S. Government and Politics course involves the study of democratic ideas, balance of powers, and tension between the practical and ideal in national policymaking. Students analyze and discuss the importance of various constitutional principles, rights and procedures, institutions, and political processes that impact us as citizens.

SOCIAL STUDIES ELECTIVES

These cannot be substituted for the above social studies courses.

Economics: *ECONOMICS 703200*

Grades 9-12

.5 credit/1 semester

Identify and evaluate the benefits and costs of alternative public policies, and assess who enjoys the benefits and who bears the costs, identify some public policies that may cost more than the benefits they generate, and assess who enjoys the benefits and who bears the costs. Explain why the policies exist. Interpret media reports about current economic conditions and explain how these conditions can influence decisions made by consumers, producers, and government policy makers. Make informed decisions by anticipating the consequences of inflation and unemployment. Anticipate the impact of federal government and Federal Reserve System macroeconomic policy decisions on themselves and others.

Geography: *GEOGRAPHY 703300*

Grades 9-12

.5 credit/1 semester

The purpose of this course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

College Sociology: *SOCIOLOGY 73410X*

Grades 11-12

.5 credit/1 semester

A college level course through WVNCC and taught at Magnolia High School. Part of this course will be online and part will be with current staff. Students must have qualifying scores on the ACT or ACCUPLACER. The required scores are ACT: Reading 17 and English 18 or a passing ACCUPLACER score. The cost of this course is \$25 per credit hour. Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships of individuals and groups in society. These courses may examine a specific topic in sociology, such as culture and society or the individual in society, rather than providing an overview of the field of sociology.

College Psychology: *COLLEGE PSYCH 73210X*

Grades 11-12

.5 credit/1 semester

A college level course through WVNCC and taught at Magnolia High School. Part of this course will be online and part will be with current staff. Students must have qualifying scores on the ACT or ACCUPLACER. The required scores are ACT: Reading 17 and English 18 or a passing ACCUPLACER score. The cost of this course is \$25 per credit hour. Goal of college psychology: To understand you and others better by seeing how psychology applies to everyday life through the scientific study of behavior. It will help provide the basic principles needed for a scientific investigation of human behavior.

FINE AND/OR PERFORMING ARTS

Art I: *ART I 32110*

Grades 9-12

1 credit/2semesters

Art I is designed to reinforce and build on 21st Century Knowledge and Skills developed by the K-8 Visual Arts Content Standards and Objectives. Students produce two-dimensional and three-dimensional artworks using a variety of media, techniques, technology, and processes. Subject matter will range from simple still life, portrait, and landscape to students' choice of subject. The following media: pencil, charcoal, pen & ink, clay, paper Mache, colored pencil, chalk pastel, collage, mixed media, tempera, and watercolor will be used. They relate art skills and strategies to other disciplines, various cultures, major art movements, and historical periods. They practice responsible workplace skills and review career options which encompass 21st Century content, literacy and life skills.

Art II: ART II 321200

Grades 10-12

1 credit/2semesters

Students in Art II extend artistic skills, critical skills, and concept development through well-defined experiences in creating, reflecting, and discussing artworks. Subject matter will range from simple still life, portrait, figure, landscape to students' choice. Pencil, colored pencil, chalk and oil pastel, acrylic paint, block prints, silk screen, computer art, watercolor, clay, and plaster are some of the media that will be used. Students focus on compositional awareness through the proficient use of elements, principles, structures, and functions. Students explore various aspects of the arts in the context of global cultures and historical parameters as they examine connections between other disciplines, and technologies. Students practice responsible workplace skills and safety. They explore career opportunities. The teacher introduces the concept of portfolio development.

Art III: ART III 321300

Grades 11-12

1 credit/2semesters

Art III builds on previous content standards with a more in-depth approach. The following are some of the possible projects: painting: oil, pastel: (choice of chalk or oil); drawing: charcoal, colored pencil, and conte' crayon, scratchboard, graphic design, printmaking, and sculpture. Subject matter will cover landscape, figures, still life, animals and abstract designs. The student will choose some of the projects. Students analyze and respond to art from various global cultures visually, verbally, and in written form. Students examine and relate various themes and purposes of art forms to the total educational process. They study art history, criticism, and aesthetics in relation to individually selected artworks and develop a personal philosophy of art. The students develop portfolios which include products and critiques, and other reflective work as they develop a personal style. Skills in learning and thinking, literacy on a variety of levels and life skills for the 21st century are developed through in-depth core subject content in the arts.

Art IV: ART IV 321400

Grade 12

1 credit/2semesters

In Art IV, students develop and clarify their philosophy of art and art making through in-depth explorations with media, techniques and processes. The following projects are possible projects: painting: watercolor, acrylic or oil, pastel (chalk or oil); drawing (charcoal, conte' crayon, ink); calligraphy, graphic design, printmaking, and sculpture. Subject matter will cover landscape, figures, still life, animals and abstract designs. Students expand and refine a portfolio reflecting a broad base of global and personal knowledge in the arts. Students take part in

planning and installing an exhibition. 21st century learning and thinking skills, literacy in a variety of forms, and life skills are applied to content and projects.

Advanced Studio Art I: *STDO ART I 324100*

Grades 9-12

1 credit/2semesters

Studio Art electives provide in-depth study in selected media, techniques, and processes. Foundation classes such as Art I are strongly recommended but not required. Expectations encompass proficiency of craftsmanship; participation in field experiences; incorporation of modern technology; study of 21st century art careers and related professions; an understanding of contemporary or related vocabulary literacy; understanding the properties of the media; and the safe and responsible use and care of equipment, tools and materials reflecting life skills. Studio Art electives include but are not limited to the following courses taught at the proficiency level: air brush, animation, architecture, batik, calligraphy, ceramics, color and design, commercial art, computer graphics, craft, design principles, drawing, electronic imaging, ethnic art, fiber arts, folk art, film, functional design, graphic design, jewelry, mixed media, painting, photography, printmaking, sculpture, stage design, and stained glass.

Advanced Studio Art II: *STDO ART II 324200*

Grades 10-12

1 credit/2semesters

Studio Art II electives provide advanced in-depth study of selected media, techniques, and processes. The advanced level classes require Studio Art I prerequisites in the same area of study or teacher approval. Students demonstrate advanced levels of craftsmanship; knowledge of art careers and related professions; advanced level skills in the use of related vocabulary; and proficiency in the selection and use of the media. They practice field experiences, application of contemporary technology and the safe and responsible care and use of the media. These skills and concepts build on the 21st century skills of the Studio I course, further developing and refining them. Studio Art II electives include but are not limited to the following courses taught at the advanced level: air brush, animation, architecture, batik, calligraphy, ceramics, color and design, commercial art, computer graphics, crafts, design principles, drawing, electronic imaging, ethnic art, fiber arts, folk art, film, functional design, graphic design, jewelry, mixed media, painting, photography, printmaking, sculpture, stage design, and stained glass.

Ceramics/Pottery I: *CRMC/POTRY I 330700*

Grades 9-12

Ceramics/Pottery II: *CRMC/POTRY II 330800*

Grades 10-12

1 credit/2semesters

Ceramics/Pottery courses cover the same topics as creative art-comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, the transformation under heat, and the various methods by which objects are created and finished. Ceramics and Pottery II can only be taken after completing Ceramics and Pottery I.

Crafts: *CRAFTS 331900*

Grades 9-12

1 credit/2semesters

Crafts courses teach the same lessons as creative art-comprehensive courses, but do so with a focus on craft. A wide range of crafts may be surveyed, or the course may focus on only

one type; possibilities include calligraphy, quilting, silk-screening, cake decorating, tole-painting, mask-making, knitting, crocheting, paper-making, and so on.

Band I: *BAND I 361100*

Grades 9-12

1 credit/2semesters

The Beginning Band objectives are written for the student who has begun the study of a band instrument. Typically, the student is at the elementary level, but due to delayed entry into band or differences in scheduling, he/she could also be at the middle or high school level. The beginning band student learns basic playing skills, performance criteria and begins exploring relationships between music and other disciplines.

Band II: *BAND II 361200*

Grades 10-12

1 credit/2semesters

The Intermediate Band objectives are written for the student who has advanced beyond the beginning study of a band instrument. Typically, this is a student at the middle school or junior high level, but he/she may be an advanced elementary student or a high school student who has not progressed to the advanced level. The student at the Intermediate level will continue to develop basic playing skills. He/she learns additional notes, fingerings and more rhythmic variations in notation. The student will further develop articulation, rhythmic interpretation, and self-evaluation skills. The student will have the opportunity to learn basic ensemble techniques and sight-reading. The student plays music from the West Virginia Bandmasters Association Graded Music List. This list can be obtained from the West Virginia State Arts Coordinator.

Band III: *BAND III 361300*

Grades 11-12

1 credit/2semesters

The Advanced Band objectives are written for the student who has progressed through the intermediate study of a band instrument. Typically, this student is at the high school level, but may also be an advanced middle school or junior high student. The student at the advanced level will continue to refine playing skills and study various composers, compositions, and styles. He/she learns to play in more keys, use ornamentation, and perform with more precision. The advanced level student will study the formal structures and elements of music and learn how these are used by composers. He/she will learn about the historical context of the music performed, especially American music. The student plays music from the West Virginia Bandmasters Association Graded Music List. This list can be obtained from the West Virginia State Arts Coordinator.

Band IV: *BAND IV 361400*

Grade 12

1 credit/2 semesters

The Advanced Band objectives are written for the student who has progressed through the intermediate study of a band instrument. Typically, this student is at the high school level, but may also be an advanced middle school or junior high student. The student at the advanced level will continue to refine playing skills and study various composers, compositions, and styles. He/she learns to play in more keys, use ornamentation, and perform with more precision. The advanced level student will study the formal structures and elements of music and learn how these are used by composers. He/she will learn about the historical context of the music performed, especially American music. The student plays music from the West Virginia

Bandmasters Association Graded Music List. This list can be obtained from the West Virginia State Arts Coordinator.

Instrumental Ensemble-Percussion: *INSTR ENSEMBL-P 374300* **Grades 9-12**
1 credit/2 semesters

Develop technique for playing percussion (e.g., percussion ensemble) in small ensemble groups. Instrumental ensemble courses cover one or more instrumental ensemble or band literature styles.

Chorus I (Beginning): *CHRS I BGN 362100* **Grades 9-12**
1 credit/2 semesters

The Beginning Choral Music objectives are written for students who have begun their study of voice. Typically, these students would be at the elementary or early middle school level, but due to delayed entry into choral programs or differences in scheduling, these students could also be at the late middle school or high school level. These students learn basic singing skills, performance criteria, and begin to explore relationships between music, and other disciplines.

Chorus II (Intermediate): *CHRS II INT 362200* **Grades 10-12**
1 credit/2 semesters

The Intermediate Choral Music objectives are written for students who have advanced past the beginning study of voice. Typically, these students would be at the late middle school level or high school level, but the class may include more advanced elementary or early middle school students who have not progressed to the Advanced level. Students at the Intermediate level build on previously studied skills, learning additional choral techniques and more developed singing styles. They further develop their singing range, ensemble singing, sight-reading and self-evaluation skills.

Chorus III (Advanced): *CHRS III 362300* **Grades 11-12**
1 credit/2 semesters

The Advanced Choral Music objectives are written for students who have progressed through the intermediate study of voice. Typically, these would be students at the high school level, but may also include more advanced late middle school students. The students at the Advanced level will continue to refine their singing skills. They study various composers, choral music and styles. They learn to sing using expression developing further technique. Advanced students will study formal structures and elements of music applying them to singing. They will learn historical context of music selections and relate these to history and culture.

Chorus IV: *CHRS IV 362400* **Grade 12**
1 credit/2 semesters

The Advanced Choral Music objectives are written for students who have progressed through the intermediate study of voice. Typically, these would be students at the high school level, but may also include more advanced late middle school students. The students at the Advanced level will continue to refine their singing skills. They study various composers, choral music and styles. They learn to sing using expression developing further technique. Advanced students will study formal structures and elements of music applying them to singing. They will learn historical context of music selections and relate these to history and culture.

Music Theory: MUSIC THRY 375600**Grades 9-12**

1 credit/2 semesters

Courses in music theory teach an understanding of the fundamentals of music, and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading; music theory courses may or may not require previous musical experience.

Guitar I: GUITAR I 372600**Grades 9-12****Guitar II: GUITAR II 372700****Grades 10-12**

1 credit/2 semesters

Guitar courses present fundamentals of music and guitar playing techniques, such as strumming and chords; the courses may include more advanced guitar playing techniques.

Piano I: PIANO I 368100**Grades 9-12**

1 credit/2 semesters

The beginning piano objectives are written for students who have begun their study of the piano. Typically, these students have never studied an instrument or have had minimal musical training. The student learns the correct wrist, hand, and body positions in playing major scales, block and broken chord patterns, cadences using I, IV, and V chords, and simple pieces. They accompany simple melodies with broken chord accompaniment. Sight-reading in treble and bass clefs are practiced and evaluation skills are developed.

Piano II: PIANO II 368200**Grades 10-12**

1 credit/2 semesters

The intermediate piano objectives are written for students who are continuing their study of piano. The student refines his/her playing technique, practices major and minor scales and cadences, and composes a melody with accompaniment. Music reading and evaluation skills are expanded. The various roles of keyboard musicians are examined.

Theatre/Stagecraft: THTR/STAGE 385900**Grades 9-12**

1 credit/2 semesters

Drama-stagecraft courses are intended to promote students' experience and skill development in one or more aspects of theatrical production, but concentrate on stagecraft (such as lighting, costuming, set construction, makeup, stage management, and so on). Initial courses are usually introductory in nature.

Theatre I: THEATRE I 380100**Grades 9-12**

1 credit/2 semesters

Upon successful completion of Theatre I, students will be able to adapt stories for performance; identify contemporary styles of theatre/drama and depict characters in them; identify basic elements of technical theatre and demonstrate technical theatre knowledge and skills. They will discuss multiple interpretations for production ideas and identify how the non-dramatic art forms enhance a theatre production. The student will also explore how culture, historical period and context influence the creation and interpretation of theatre.

Theater II: THEATRE II 380200**Grades 10-12**

1 credit/2 semesters

Theatre II students write, perform, and evaluate theatre productions, identify and demonstrate selected historical style of theatre/drama, and perform contemporary and classical characters' parts. Students explain basic properties of technical theatre and apply that knowledge and skill. They develop multiple interpretations for production choices and explain how other art forms enhance a theatre production. Analysis and critique of dramatic performances is required.

Theatre III: THEATRE III 380300**Grades 11-12**

1 credit/2 semesters

Theatre III students will collaborate in developing original dramatic pieces or short plays and will demonstrate ensemble in rehearsing and performing informal and formal theatre works. They will identify how scientific and technological advances have impacted theatre and will assist directors in developing safe production concepts. Students will also assist in creating and implementing a production.

Theatre IV: THEATRE IV 380400**Grade 12**

1 credit/1 semesters

Theatre IV students will write scripts which may include multi-media productions and will demonstrate artistic discipline to achieve ensemble in rehearsal and performance of informal and formal theatre works as well as in film, television, or electronic media. They will explain how scientific and technological advances have impacted theatre, and will collaborate with directors to develop unified production concepts. Students will collaborate with designers and actors, and will be able to demonstrate direction skills. Students will develop and document evidence of their own artistic growth.

Film Studies: FILM STU 381900**Grades 9-12**

1 credit/2 semesters

The class will begin with screenwriting where students will develop characters and a storyline. We will use Final Draft software to write the screenplay. Students will learn camera techniques including set-up, long shots, close-ups, lighting and dolly shots. Students will learn about camera functions such as Aperture, ISO, use of different lenses and Exposure for digital cameras. Students will then break the screenplay into shooting schedule and start filming. Students will learn to edit picture and sound using Davinci Resolve 12. The WV Thespian Festival now offers a competition for short film as part of their Tech Expo. Students will be expected to have one short film to enter into the competition.

FOREIGN LANGUAGE

**Other languages may be available in a Virtual Classroom. You will need to discuss this with your counselor.*

Spanish I: SPANISH I 566100**Grades 9-11**

1 credit/2 semesters

The acquisition of communication skills is the primary focus of Modern Foreign Languages Level I objectives. Beginning students will develop initial proficiency by repetition,

imitation and memorization. They will rely on active, concrete learning and will understand short, simple texts. They will use gestures, facial expressions, visual and/or verbal responses to facilitate successful task completion. Level I students will understand and be best understood by someone who is accustomed to working with a beginning language learner.

Spanish II: *SPANISH II 566200*

Grades 9-12

1 credit/2 semesters

The acquisition of communication skills continues to be the primary focus of Modern Foreign Languages Level II objectives. Level II students refine communication skills by combining and recombining vocabulary into sentences and longer utterances. They rehearse, initiate questions, and express their own ideas using basic tenses with some limitations. Level II students negotiate two-way communication by relying on strong visual and auditory feedback. Errors may occur as creativity increases. Level II students are comprehensible to a sympathetic native speaker accustomed to communicating with a non-native.

Spanish III: *SPANISH III 566300*

Grades 10-12

1 credit/2 semesters

The development of communication skills becomes the primary focus of Modern Foreign Languages Level III objectives. Level III students extend communication skills by expressing their own thoughts in strings of sentences. They initiate questions on a variety of topics, using acceptable, if not always precise, vocabulary, and they show some understanding of idiomatic expressions. Level III students may invent words or use circumlocution to stay in the target language and use expressive reactions to elicit more information. Level III students sustain communication, with some fluency, on familiar topics in a number of settings. With preparation, they can coordinate multiple tenses in spite of some errors. They are generally comprehensible to a sympathetic native speaker, although at times, some communicative lapses may occur.

Spanish IV: *SPANISH IV 566400*

Grades 11-12

1 credit/2 semesters

The expansion of communication skills remains the focus of Modern Foreign Languages Level IV objectives. Level IV students expand communication skills by initiating and maintaining conversations using an extensive vocabulary on a number of topics and in various settings. They also use a variety of interrogative styles and other interactive techniques to exercise control during communication. Level IV students successfully explain or describe concepts when the precise term is not available. These students supplement their vocabulary by referring to dictionaries and other references, rather than relying on the teacher. Students report, narrate and describe by connecting sentences with transitions to create paragraph-length discourse in both oral and written communication. They express, with ease, their own thoughts in numerous tenses on an impromptu basis. They also respond to hypothetical situations and react with other types of speculative thinking, e.g., stating hopes, wishes and rationales. Level IV students communicate with little hesitation and with an accent/intonation that does not detract from comprehensibility. Errors may occur from time to time without any significant effect on the flow of communication. Students are comprehensible to a native speaker, with clarification as needed.

PHYSICAL EDUCATION/HEALTH EDUCATION

Physical Education 9: *PHYS ED 9 660990***Grade 9**

.5 credit/1 semester

Physical education can be a vehicle through which high school student's transition from adolescence to adulthood. High school physical education programs should focus on fitness, offer diverse movement patterns, development of motor skills and emphasize lifetime activities. Students need to be exposed to a wide variety of activities, both competitive and noncompetitive that bring them enjoyment and challenge, thus enabling them to maintain an active lifestyle for a lifetime.

Physical Education 10: *PHYS ED 10 660910***Grade 10**

.5 credit/1 semester

Physical education can be a vehicle through which high school student's transition from adolescence to adulthood. High school physical education programs should focus on fitness, offer diverse movement patterns, development of motor skills and emphasize lifetime activities. Students need to be exposed to a wide variety of activities, both competitive and noncompetitive that bring them enjoyment and challenge, thus enabling them to maintain an active lifestyle for a lifetime.

Life Fitness: *LIFE FITNESS 673300***Grades 9-12**

1 credit/2 semesters

The acquisition of knowledge and skills regarding lifetime physical fitness is emphasized in these courses; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan.

Weight Training: *WEIGHT TRN 676500***Grades 9-12**

1 credit/2 semesters

This is an elective course in addition to Physical Education 9 and 10. The course objectives are to assess personal fitness related to the five components of fitness: cardiovascular fitness, muscular strength, muscular endurance, body composition, and flexibility; to use principles of training to design and implement a personal fitness program, and to compare relative fitness value of specific physical activity forms.

Team Sports: *TEAM SPORT 675700***Grades 9-12**

1 credit/2 semesters

Team sports courses provide experience and develop skills in more than one team sport (such as volleyball, basketball, soccer, and so on).

Health 9: *HEALTH 9 690990***Grade 9**

.5 credit/1 semester

Topics covered within health education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. Brief studies of environmental health, personal development, and/or community resources may be included.

Health 10: *HEALTH 10 690910***Grade 10**

.5 credit/1 semester

Topics covered within health education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. Brief studies of environmental health, personal development, and/or community resources may be included.

MISCELLANEOUS

School Yearbook: *SCH YRBOOK 707100*

Grades 9-12

1 credit/2 semesters

Yearbook is a course that will produce the school annual publication—*The Magnolian*. Students will be assigned various tasks associated with the production of the book, incorporating skills in art, photography, business (advertising/marketing), writing, and design in the process. Working with professionals in related fields, students will create a work that will be published and presented to the community. Other criteria and projects may be established once the student is admitted to the program. Production courses provide the technical knowledge and skills necessary to understand and critically evaluate the role of media in society. Therefore, students must have a working knowledge of writing, camera operation, use of graphics, and a creative mind in order to develop the media product. The potential student should be self-motivated and able to offer critique as well as accept criticism.

Drivers Education: *DRVR ED 681100*

Grades 9-12

.5 credit/2 semesters

The goals of the Driver Education Program of Study are to provide students with the knowledge and skills to safely and efficiently operate a motor vehicle on our nation's streets and highways, to equip students with the knowledge to enable them to make wise decisions as drivers, and to assist students to become responsible users of the highway transportation system. West Virginia's vision for education includes the integration of technology throughout the curriculum so that all West Virginia students have the opportunity to develop technology skills that support learning. Successful learning environments provide opportunities for students to use education technology interwoven with relevant curriculum content. West Virginia teachers are responsible for integrating technology appropriately in the students' learning environment.

*This course must be paired with an elective.

Peer Tutoring: *PEER TUTOR 783100*

Grades 10-12

1 credit/2 semesters

Students will work with peers in various aspects of their daily school day. Students may be required to assist with classwork, cooking, PAES lab activities and so on during the school day. Students will be required to also complete an activity outside of the regular school day such as going shopping or to a sporting event for extra socialization. Students may be required to complete an informal application or interview to be considered for this program.

VIRTUAL COURSES

Students may want to take courses that MHS is unable to offer. Please see your counselor for details before scheduling. For a list of available courses go to <http://wveis.k12.wv.us/vschool/courses/coursecatalog.cfm>.

CTE COURSES

If you enroll in a CTE course either at Magnolia High School or MOVTI you will be subject to the simulated workplace protocols as listed below.

Simulated Workplace Protocols

The overall structure of the Simulated Workplace initiative is governed by a set of protocols to assure consistency and quality in the local implementation of the concept. These protocols include the following requirements:

CTE programs will:

1. Transform the classroom environment into a replicated company;
2. Utilize time clocks or some other form of formal attendance recording process;
3. Drug test all students enrolled in a CTE course at the beginning of the school year;
4. Adhere to the county developed Random Drug Testing Policy, while testing a minimum of 40% of all students enrolled within a Simulated Workplace classroom (where applicable for safety);
5. Conduct an application / interview process for enrolling students;
6. Develop a company name and procedures / protocol manual;
7. Ensure all students receive quality safety training;
8. conduct a 5-10 minute company meeting daily or weekly;
9. Submit Quarterly and Annual reports developed by students and instructor;
10. Establish work teams and an organizational system with students rotating across teams;
11. Integrate the 5S Continuous Quality Improvement principles;
12. Participate in Business and Industry yearly onsite evaluations; and
13. Utilize a portfolio system for students to document learning, credentials earned, projects completed, etc.

**Listed below are the completer programs to be offered the 2017-2018 school year at Magnolia High School. All students are encouraged to become a completer either at Magnolia or MOVTI to assist with their college and career plans. The courses do not have to be taken in the exact order listed unless the instructor requires it.*

Agriculture, Food and Natural Resources Cluster

- **AG 0230 Animal Processing**
0101 Introduction to Agriculture, Food and Natural Resources

- 0139 Fundamental of Animal Processing
 - 0151 Animal Processing - Retail
 - 0134 Agricultural Experience Program (Non-Classroom)
 - **AG 0110 Power, Structural and Technical Systems**
 - 0101 Introduction to Agriculture, Food and Natural Resources
 - 0112 Fundamental of Agriculture Mechanics
 - 0113 Agriculture Structures
 - 0134 Agricultural Experience Program (Non-Classroom)
 - **AG0210 Plant Systems**
 - 0101 Introduction to Agriculture, Food and Natural Resources
 - 0212 Horticulture
 - 0214 Greenhouse Production and Management
 - 0134 Agricultural Experience Program (Non-Classroom)
 - **AG0170 Natural Resources Management**
 - 0101 Introduction to Agriculture, Food and Natural Resources
 - 0200 Natural Resources Management
 - 0183 Forest Management or 0190 Fish and Wildlife Management
 - 0134 Agricultural Experience Program (Non-Classroom)
 - **AG0120 Agribusiness Systems**
 - 0101 Introduction to Agriculture, Food and Natural Resources
 - 0102 The Science of Agriculture
 - 0134 Agricultural Experience Program (Non-Classroom)
- Electives (1 Class)**
- 0212 Horticulture
 - 0112 Fundamental of Agriculture Mechanics
 - 0139 Fundamental of Animal Processing

(The non-classroom courses will be work completed outside of the regular school day)

Business Management and Administration Cluster

- **BM 1465 Management and Administrative Support**
 - 1439 Business and Marketing Essentials

Electives (Choose 3)

 - 1401 Accounting I
 - 1403 Accounting II
 - 1411 BCA I
 - 1413 BCA II
 - 1499 Office Management
- **BM 1410 Accounting**
 - 1401 Accounting I

1403 Accounting II

Electives (Choose 2)

1439 Business and Marketing Essentials

1411 BCA I

1413 BCA II

1449 Office Management

Information Technology Cluster

- **IT1450 Information Management**

1411 BCA I

1431 Digital Imaging/Multimedia I

1455 Web Page Publishing

1413 BCA II

Health Science Cluster

- **HE 1215 Food Science and Nutrition**

0951 Food Preparation

0950 Nutrition and Foods Foundation

0952 Nutrition and Food Science

0953 Nutrition and Food Advanced

Science, Technology, Engineering and Mathematics Cluster

- **ST 2205 Innovations in Science and Technology (Advanced Career)**

1545 AC Innovations in Science and Technology I

1546 AC Innovations in Science and Technology II

1547 AC Innovation in Science and Technology III

1548 AC Innovation in Science and Technology IV

(These courses will be taught in a block section. I and II will be offered to juniors only and III and IV to seniors only after successfully completing I and II)

Manufacturing Cluster

- **MA1980 Welding**

1862 Welding I

1863 Welding II

1864 Welding III

1865 Welding IV

(This program will be offered either in the morning or the afternoon and students will in a block situation with half the day for Welding and the other half the core courses. This program may only be for juniors and seniors.)

Arts, A/V Technology and Communications Cluster

- **AV2010 Performing Arts**

1445 Management and Entrepreneurship

1455 Web Page Publishing

(Choose Specialization)

Instrumental A1

3613 Band III

3614 Band IV

Instrumental A3

3681 Piano I

3682 Piano II

Instrumental A4

3726 Guitar I

3727 Guitar II

Vocal B

3623 Chorus III

3624 Chorus IV

Theatrical C

3803 Theatre III

3804 Theatre IV

- **AV 2015 Visual Arts**

1455 Web Page Publishing

1431 Digital Imaging/Multimedia I

3213 Art III

3214 Art IV

AGRICULTURAL, FOOD AND NATURAL RESOURCES (AG)

**All courses may not be available each year.*

AG0120 Agribusiness Systems

AG0230 Animal Processing

AG0110 Power, Structural and Technical Systems

AG0210 Plant Systems

AG0170 Natural Resources Management

AG0120 Agribusiness Systems

Intro to agriculture, food and natural resources: *INTR AG FD&NAT 010100* Grades 9-12

1 credit/2 semesters

This area of study is designed to provide students with core skills and competencies needed for pursuing careers in agriculture and natural resources. Students will utilize problem-solving

techniques and participate in laboratory activities to develop an understanding of course concepts. Safety instruction is integrated into all activities. Teachers should provide each student with real world learning opportunities and instruction related to selection, development, and maintenance of individual Supervised Agricultural Experience (SAE) programs. Students are encouraged to become active members of FFA, the national youth organization for those enrolled in agricultural education. FFA is an integral component of the program and provides curricular opportunities that enhance student achievement. Teachers should utilize relevant FFA activities to support experiential learning.

The Science of Agriculture: *SCI AG 010200*

Grades 9-12

1 credit/2 semesters

This area of study is designed to provide students with core skills and competencies needed for pursuing careers in agriculture and natural resources. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts. Safety instruction is integrated into all activities. Teachers should provide each student with real world learning opportunities and instruction related to selection, development, and maintenance of individual Supervised Agricultural Experience (SAE) programs. Students are encouraged to become active members of FFA, the national youth organization for those enrolled in agricultural education. FFA is an integral component of the program and provides curricular opportunities that enhance student achievement. Teachers should utilize relevant FFA activities to support experiential learning.

Fundamentals of Agriculture Mechanics: *FUND AG MECH 011200*

Grades 9-12

1 credit/2 semesters

This area of study is designed to provide learners with job entry-level skills in the agricultural mechanics industry. Major instructional concepts include an orientation to careers in agricultural mechanics, safety, engines and equipment, drawing and blueprinting, and hand and power tools. Safety instruction is integrated into all activities. Teachers should provide each student with real world learning opportunities and instruction related to selection, development, and maintenance of individual Supervised Agricultural Experience (SAE) programs. Students are encouraged to become active members of FFA, the national youth organization for those enrolled in agricultural education. FFA is an integral component of the program and provides curricular opportunities that enhance student achievement. Teachers should utilize relevant FFA activities to support experiential learning.

Agricultural Experience Program: *AG EXPER PRG 013400*

Grades 9-12

.5 credit/1 semester

Students enrolled in agricultural education courses have the unique opportunity for experiential and contextual learning on a grand scale. Students may select and participate in appropriate agricultural enterprises which provide opportunity to acquire skills, earn money and develop responsibility while also earning high school credit. This course code (WVEIS 0134) provides county school systems the vehicle whereby credit can be awarded for such individual Supervised Agricultural Experience (SAE) programs occurring as an outgrowth from other agricultural education courses. Students receiving SAE credit are students in other agricultural education courses and are encouraged to become active members of FFA, the national youth organization for those enrolled in agricultural education. FFA is an integral component of the

program and provides curricular opportunities that enhance student achievement. Teachers should utilize relevant FFA activities to support experiential learning.

Horticulture: *HORTICULTURE 0212E0*

Grades 10-12

1 credit/2 semesters

This course provides instruction on the broad field of horticulture with emphasis on the scientific and technical knowledge for a career in horticulture. Topics in this course include plant growth and development, plant nutrition, media selection, basic plant identification, pest management, chemical disposal, customer relations, career opportunities, leadership development and entrepreneurial skills. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Fundamentals of Animal Processing: *FUND ANML PROC 0139E0*

Grades 10-12

1 credit/2semesters

*Students enrolling in this class are encouraged to have a ham and/or bacon project and supply their own pig. This course introduces students to the principles and applications of animal processing. Students will learn carcass grading, primal and retail cuts, workplace safety, how to process primal and retail cuts, and entrepreneurship. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Animal Processing – Retail: *ANIMAL PROC RTL 0139E0*

Grades 10-12

1 credit/2semesters

This course is designed to give students the skills and knowledge needed to enter a career in the retail industry of animal processing. This course will build upon the concepts learned in Fundamentals of Animal Processing and emphasize retail cut processing, creating value added products, working with the public, and entrepreneurship. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Agriculture Structures: *AG STRUCTURES 0113E0*

Grades 10-12

1 credit/2semesters

Students will use computer skills to develop simple sketches and plans, read and relate structural plans to specifications and building codes, estimate project costs, use construction/fabrication equipment and tools, and plan and design machinery, equipment, buildings and facilities. Students utilize problem-solving techniques and participate in hands-on

activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Greenhouse Production and Management: *GRNHSE PROD 0214E0* **Grades 10-12**
1 credit/2semesters

This specialization course covers instruction that expands the scientific knowledge and skills to include more advanced scientific computations and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production, watering systems light effects, career planning, leadership development and entrepreneurial skills. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Natural Resources Management: *NATL RESC MGMT 0200E0* **Grades 10-12**
1 credit/2semesters

This specialization course covers topics on soil and water conservation, basic wildlife management, environmental law and regulations, basic forestry, and land management. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Forest Management: *FOREST MGMT 0183E0* **Grades 10-12**
1 credit/2semesters

This course is designed to be a basic forestry course for students interested in forestry. The course will cover topics on best management practices, timber felling basics, dendrology, tree measurement basics, water quality, forest fire, read topography maps and basic log road layout, forest hazards ID, basic forestry concepts of edge, diversity, succession and structure, forest business and economics, forest insects, forest disease, and entrepreneurship. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Fish and Wildlife Management: *FISH & WLDF MGT 0190E0* **Grades 10-12**
1 credit/2semesters

This specialization course covers topics on advanced wildlife management principles, water quality, fish biology, history of fish and wildlife, habitat management, life history and wildlife values as a natural resource. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide

each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

BUSINESS MANAGEMENT AND ADMINISTRATION (BM)

BM1465 Management and Administrative Support
BM1410 Accounting

Business Computer Applications I: *BUS CMPTR I 1411E0*

Grades 9-12

1 credit/2semesters

This area of study is designed to provide students with the knowledge to understand and apply integrated software to business applications. The students will review keyboarding and achieve basic proficiency in word processing, spreadsheets, presentations, database applications, Internet, and/or personal information programs. Teachers should provide each student with real world learning opportunities and instruction related to business and technology occupations. Students are encouraged to become active members of the student organizations FBLA or DECA.

Business Computer Applications II: *BUS CMPTR 1413E0*

Grades 10-12

1 credit/2semesters

This area of study is designed to provide students with the knowledge and skills needed in achieving proficiency in the use of software packages in the areas of word processing, spreadsheet, database, Internet, and multimedia software. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to business and technology occupations. Students are encouraged to become active members of the student organizations FBLA or DECA.

Accounting Principles I: *ACCT PRIN I 1401E0*

Grades 10-12

1 credit/2semesters

This area of study is designed to provide students with the knowledge and skills needed in Accounting Principles I. This course prepares the student to understand the basic principles, concepts, and practices of the accounting cycle. Journalizing, posting, and analyzing of financial statement as well as banking and payroll procedures are included. The importance of ethics and confidentiality, as well as, an introduction to careers and types of business ownership are incorporated. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to accounting occupations. Students are encouraged to become active members of the student organizations, FBLA or DECA.

Accounting Principles II: *ACCT PRIN II 1403E0*

Grades 11-12

1 credit/2semesters

This course provides students the opportunity to develop advanced knowledge of accounting procedures and techniques utilizing both manual and computer-based accounting. There is a strong emphasis on problem solving, analysis, and financial decision-making.

Students study the advanced principles, concepts and practices of the accounting cycle and partnerships, corporations, cost accounting, inventory, and tax accounting. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to accounting occupations. Students are encouraged to become active members of the student organizations FBLA or DECA.

Business and Marketing Essentials: *BUS MKT ESSTL 1439E0*

Grades 9-12

1 credit/2semesters

This area of study provides students with the knowledge and skills needed in marketing, business, and related occupations. The program area provides individuals with the principles, practices, and concepts involved in business activities, which direct the transfer of goods and the acquisition of services from producer to the consumer. Students also gain the professional or skilled knowledge and skills necessary in beginning a career in the marketing, business, and management fields. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to selection, development, and maintenance of individual business and marketing education programs. Students are encouraged to become active members of the student organizations, FBLA or DECA, national student organizations for those enrolled in business or marketing education. FBLA and DECA are integral components of the programs and both provide curricular opportunities that enhance student achievement. Teachers should use relevant FBLA or DECA activities to support experiential learning.

Office Management: *OFFICE MGMT 1449E0*

Grades 9-12

1 credit/2 semesters

This area of study is designed to aid students in becoming skillful in the operation of an office. Major instructional areas include personal development and employability skills, managing records, processing mail, communication duties, keeping financial records, applying computing, accounting, and data skills, processing business correspondence, operating office equipment, using management skills, and completing office support activities. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning business opportunities. Students are encouraged to become active members of the student organizations FBLA or DECA. A prerequisite in Keyboarding Applications or Business Computer Applications I is strongly recommended.

INFORMATION TECHNOLOGY (IT)

IT1450 Information Management

Business Computer Applications I: *BUS CMPTR I 1411E0*

Grades 9-12

1 credit/2semesters

This area of study is designed to provide students with the knowledge to understand and apply integrated software to business applications. The students will review keyboarding and achieve basic proficiency in word processing, spreadsheets, presentations, database applications, Internet, and/or personal information programs. Teachers should provide each student with real

world learning opportunities and instruction related to business and technology occupations. Students are encouraged to become active members of the student organizations FBLA or DECA.

Business Computer Applications II: *BUS CMPTR 1413E0*

Grades 10-12

1 credit/2semesters

This area of study is designed to provide students with the knowledge and skills needed in achieving proficiency in the use of software packages in the areas of word processing, spreadsheet, database, Internet, and multimedia software. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to business and technology occupations. Students are encouraged to become active members of the student organizations FBLA or DECA.

Digital Imaging/Multimedia I: *DGTL IMG/MLT I 143100*

Grades 9-12

1 credit/2semesters

This course is designed to develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Web Page Publishing: *WEBPGE PBLSH 145500*

Grades 9-12

1 credit/2semesters

This course is designed to develop student understanding and skills in such areas as Web page design including using Web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks and using codes (markup languages). Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

HEALTH SCIENCE EDUCATION (HE)

HE1215 Food Science and Nutrition

The Food Science and Nutrition concentration is designed to examine nutrition and wellness practices on long-term health, selection and preparation of nutritious food; processes and issues associated with nutrition and wellness, and the impact of science and technology on nutrition and wellness issues, and nutrition and wellness careers.

Nutrition and Foods Foundation: *NFF 09500*

Grades 9-12

1 credit/2 semesters

This course is designed to examine food preparation and management using the decision-making process; meeting basic needs by applying nutrition and wellness concepts; meeting health and safety needs in planning, preparing and serving food; maximizing resources when planning, preparing and serving food; promoting hospitality in food practices; and analyzing individual and family nutritional needs in relation to change. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers will provide each student with real world learning opportunities and instruction.

Food Preparation: *FOOD PREP 095100*

Grades 9-12

1 credit/2 semesters

This course is designed to emphasize skill development in the selection, preparation, storing, and serving of food, management of resources to meet individual and family nutritional needs and optimal use of food resources, the principles of nutrition, and the relationship of nutrition to health and well-being. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers will provide each student with real world learning opportunities and instruction.

Nutrition and Food Science: *NFS 095200*

Grades 10-12

1 credit/2 semesters

This course is designed to apply scientific principles to the production, processing, preparation, evaluation, and utilization of food. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers will provide each student with real world learning opportunities and instruction.

Nutrition and Food Advanced: *NFA 095300*

Grades 10-12

1 credit/2 semesters

This course is designed to examine nutrition and wellness practices on long-term health; planning for wellness and fitness; selection and preparation of nutritious food based on USDA Dietary Guidelines; processes and issues associated with nutrition and wellness; the impact of science and technology on nutrition and wellness issues; and nutrition and wellness career paths. Students will use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers will provide each student with real world learning opportunities and instruction.

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (ST Cluster)

ST2205 Innovations in Science and Technology (Advanced Careers)

*This program comes with a weighted grade, is only available to juniors and seniors, and is taught in a block scheduling situation.

AC Innovations in Science and Technology I: *AC IN SCI TECH I 154500* **Grade 11**
1 credit/2 semesters

This is a contextual-based course that introduces students to the core fundamental concepts of science and technology through authentic projects. Through these projects, students will develop an understanding of the relationship between the physical, biological and social world. Students will gain an understanding of the differences between science and technology, and learn that technology is a process for applying science. Students will develop a deeper understanding of scientific inquiry and the engineering design process when solving real-world problems. Students will experience the interaction of science, technology, engineering, math and literacy through a problem-based learning environment. Finally, the process will require students to use mathematics to analyze costs, develop budgets and make precise measurements to successfully implement project goals.

AC Innovations in Science and Technology II: *AC IN SCI TECH II 154600* **Grade 11**
1 credit/2 semesters

This course uses the concepts learned from Course 1 to further develop students' problem-solving strategies and skills needed by the 21st-century workforce. Students will continue to explore emerging technologies and techniques in the context of addressing authentic projects. Key concepts introduced in this course include sustainability and environmental trends, systems thinking, and trend analysis and prediction. Through engagement, students will experience the necessary connection between literacy, mathematics and science in a variety of hands-on, real world projects requiring them to apply academic and technical concepts and skills and technology to complete.

AC Innovations in Science and Technology III: *AC IN SCI TECH III 154700* **Grade 12**
1 credit/2 semesters

This course will examine the past, present and future impact of science and technology on culture, society and the environment. Students will explore how their predecessors worked to solve some problems that still exist today, and examine the potential of using modern technology to solve those problems. From these explorations, students will engage in a variety of hands-on design projects that will address tradeoffs, optimization, interconnectivity and the nature of complex systems.

AC Innovations in Science and Technology IV: *AC IN SCI TECH IV 154800* **Grade 12**
1 credit/2 semesters

This course will allow students to brainstorm, use invention, innovation, creativity, predictive analysis and use technology to solve real-world problems. Dimensions covered will include research and development, troubleshooting, experimentation, design failures, patents and trademarks, and design under constraints.

MANUFACTURING CLUSTER (MA)

MA1980 Welding

*This program will take ½ of each school day. Students may attend all morning or afternoon.

Welding I: WELDING I 1862E0

Grades 11-12

1 credit/1 semester

This course is designed to introduce the student to the knowledge base and technical skills of the Welding industry. Welding I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students will complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students will then begin developing skill sets in the fundamentals of Welding such as Welding Safety; Oxyfuel Cutting; and Plasma Arc Cutting. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding II: WELDING II 1863E0

Grades 11-12

1 credit/1 semester

Welding II will continue to build student skill sets in areas of Air Carbon Arc Cutting and Gouging; Base Metal Preparation; Weld Quality; SMAW-Equipment and Setup; Shielded Metal Arc Electrodes; SMAW-Beads and Fillet Welds; Joint Fit Up and Alignment; SMAW-Groove Welds with Backing; and SMAW-Open V-Groove Welds. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding III: WELDING III 1864E0

Grades 11-12

1 credit/1 semester

Welding III will continue to build student skill sets in areas of Welding Symbols; Reading Welding Detail Drawings; Physical Characteristics and Mechanical Properties of Metals; Preheating and Post heating of Metals; GMAW and FCAW-Equipment and Filler Metals; and GMAW and FCAW-Plate. Students utilize problem-solving techniques and participate in hands on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding IV: WELDING IV 1865E0

Grades 11-12

1 credit/1 semester

Welding IV will continue to build student skill sets in areas of GTAW-Equipment and Filler Metals; and GTAW-Plate. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS (AV)

AV2010 Performing Arts

AV2015 Visual Arts

Management and Entrepreneurship: *MGMT ENTRPR 144500*

Grades 9-12

1 credit/2 semesters

This area of study provides a background for the development and operation of a business starting with the role of the entrepreneur and leading to the development of a business plan. This course also explores the planning, organizing, controlling, and operation of a business. Students will utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction related to selection, development, and maintenance of individual marketing and business education programs. Students are encouraged to become active members of the student organizations, DECA or FBLA, national student organizations for those enrolled in marketing and business education. DECA and FBLA are integral components of the programs and provide curricular opportunities that enhance student achievement. Teachers should use relevant DECA or FBLA activities to support experiential learning. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and 21st Century Learning Skills and Technology Tools. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Web Page Publishing: *WEBPGE PBLSH 145500*

Grades 9-12

1 credit/2 semesters

This course is designed to develop student understanding and skills in such areas as Web page design including using Web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks and using codes (markup languages). Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Band III: *BAND III 361300*

Grades 11-12

1 credit/2semesters

The Advanced Band objectives are written for the student who has progressed through the intermediate study of a band instrument. Typically, this student is at the high school level, but may also be an advanced middle school or junior high student. The student at the advanced level will continue to refine playing skills and study various composers, compositions, and styles. He/she learns to play in more keys, use ornamentation, and perform with more precision. The advanced level student will study the formal structures and elements of music and learn how these are used by composers. He/she will learn about the historical context of the music performed, especially American music. The student plays music from the West Virginia Bandmasters Association Graded Music List. This list can be obtained from the West Virginia State Arts Coordinator.

Band IV: *BAND IV 361400*

Grade 12

1 credit/2 semesters

The Advanced Band objectives are written for the student who has progressed through the intermediate study of a band instrument. Typically, this student is at the high school level, but may also be an advanced middle school or junior high student. The student at the advanced level will continue to refine playing skills and study various composers, compositions, and styles. He/she learns to play in more keys, use ornamentation, and perform with more precision. The advanced level student will study the formal structures and elements of music and learn how these are used by composers. He/she will learn about the historical context of the music performed, especially American music. The student plays music from the West Virginia Bandmasters Association Graded Music List. This list can be obtained from the West Virginia State Arts Coordinator.

Piano I: *PIANO I 368100*

Grades 9-12

1 credit/2 semesters

The beginning piano objectives are written for students who have begun their study of the piano. Typically, these students have never studied an instrument or have had minimal musical training. The student learns the correct wrist, hand, and body positions in playing major scales, block and broken chord patterns, cadences using I, IV, and V chords, and simple pieces. They accompany simple melodies with broken chord accompaniment. Sight-reading in treble and bass clefs are practiced and evaluation skills are developed.

Piano II: *PIANO II 368200*

Grades 10-12

1 credit/2 semesters

The intermediate piano objectives are written for students who are continuing their study of piano. The student refines his/her playing technique, practices major and minor scales and cadences, and composes a melody with accompaniment. Music reading and evaluation skills are expanded. The various roles of keyboard musicians are examined.

Guitar I: *GUITAR I 372600*

Grades 9-12

Guitar II: *GUITAR II 372700*

Grades 10-12

1 credit/2 semesters

Guitar courses present fundamentals of music and guitar playing techniques, such as strumming and chords; the courses may include more advanced guitar playing techniques.

Chorus III (Advanced): CHRS III 362300**Grades 11-12**

1 credit/2 semesters

The Advanced Choral Music objectives are written for students who have progressed through the intermediate study of voice. Typically, these would be students at the high school level, but may also include more advanced late middle school students. The students at the Advanced level will continue to refine their singing skills. They study various composers, choral music and styles. They learn to sing using expression developing further technique. Advanced students will study formal structures and elements of music applying them to singing. They will learn historical context of music selections and relate these to history and culture.

Chorus IV: CHRS IV 362400**Grade 12**

1 credit/2 semesters

The Advanced Choral Music objectives are written for students who have progressed through the intermediate study of voice. Typically, these would be students at the high school level, but may also include more advanced late middle school students. The students at the Advanced level will continue to refine their singing skills. They study various composers, choral music and styles. They learn to sing using expression developing further technique. Advanced students will study formal structures and elements of music applying them to singing. They will learn historical context of music selections and relate these to history and culture.

Theatre III: THEATRE III 380300**Grades 11-12**

1 credit/2 semesters

Theatre III students will collaborate in developing original dramatic pieces or short plays and will demonstrate ensemble in rehearsing and performing informal and formal theatre works. They will identify how scientific and technological advances have impacted theatre and will assist directors in developing safe production concepts. Students will also assist in creating and implementing a production.

Theatre IV: THEATRE IV 380400**Grade 12**

1 credit/1 semesters

Theatre IV students will write scripts which may include multi-media productions and will demonstrate artistic discipline to achieve ensemble in rehearsal and performance of informal and formal theatre works as well as in film, television, or electronic media. They will explain how scientific and technological advances have impacted theatre, and will collaborate with directors to develop unified production concepts. Students will collaborate with designers and actors, and will be able to demonstrate direction skills. Students will develop and document evidence of their own artistic growth.

Digital Imaging/Multimedia I: DGTL IMG/MLT 143100**Grades 9-12**

1 credit/2 semesters

This course is designed to develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction.

Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Web Page Publishing: *WEBPGE PBLSH 145500*

Grades 9-12

1 credit/2semesters

This course is designed to develop student understanding and skills in such areas as Web page design including using Web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks and using codes (markup languages). Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Art III: *ART III 321300*

Grades 11-12

1 credit/2semesters

Art III builds on previous content standards with a more in-depth approach. The following are some of the possible projects: painting: oil, pastel: (choice of chalk or oil); drawing: charcoal, colored pencil, and conte' crayon, scratchboard, graphic design, printmaking, and sculpture. Subject matter will cover landscape, figures, still life, animals and abstract designs. The student will choose some of the projects. Students analyze and respond to art from various global cultures visually, verbally, and in written form. Students examine and relate various themes and purposes of art forms to the total educational process. They study art history, criticism, and aesthetics in relation to individually selected artworks and develop a personal philosophy of art. The students develop portfolios which include products and critiques, and other reflective work as they develop a personal style. Skills in learning and thinking, literacy on a variety of levels and life skills for the 21st century are developed through in-depth core subject content in the arts.

Art IV: *ART IV 321400*

Grade 12

1 credit/2semesters

In Art IV, students develop and clarify their philosophy of art and art making through in-depth explorations with media, techniques and processes. The following projects are possible projects: painting: watercolor, acrylic or oil, pastel (chalk or oil); drawing (charcoal, conte' crayon, ink); calligraphy, graphic design, printmaking, and sculpture. Subject matter will cover landscape, figures, still life, animals and abstract designs. Students expand and refine a portfolio reflecting a broad base of global and personal knowledge in the arts. Students take part in planning and installing an exhibition. 21st century learning and thinking skills, literacy in a variety of forms, and life skills are applied to content and projects.

MOVTI

*All programs will require an application process due to limited number of slots.

Automotive Technology Program (TR Cluster)

First year a.m. only

Automotive Technology MLR-1: *AUTO-TECH MLR1 163100*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills as they relate to the field of Automotive Technology. In the Automotive Technology MLR-1 class areas of study include Automotive Service Consultant, Career Opportunities and Practices, Shop and Personal Safety, Tools and Equipment, Preparing Vehicle for Service, Electrical-General Electrical System Diagnosis, Electrical-Diagnosis and Service of Batteries, and Engines-Lubrication and Cooling Systems Diagnosis and Repair. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, SkillsUSA West Virginia. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Automotive Technology MLR-2: *AUTO-TECH MLR2 162300*

Grades 11-12

1 credit/1 semester

Automotive Technology MLR-2 continues as students are exposed to skills sets in areas such as Steering and Suspension-Diagnosis and Repair of Wheels and Tires, Brakes-Diagnosis and Repair of Hydraulic Systems, Brakes-Diagnosis and Repair of Drum Brake Systems, Brakes-Diagnosis and Repair of Disk Brake Systems, Brakes-Diagnosis and Repair of Power Assist Units, Brakes-Diagnosis and Repair of Miscellaneous Automotive Items, Brakes-Diagnosis and Repair of Antilock Brake Systems and Steering and Suspension-Diagnosis of Steering & Suspension Systems, Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Automotive Technology MLR-3: *AUTO-TECH MLR3 162500*

Grades 11-12

1 credit/1 semester

Automotive Technology MLR-3 build student skill sets in the areas of Electrical-Demonstrate Starting System Diagnosis and Repair, Electrical-Demonstrate Charging System Diagnosis and Repair; Electrical-Demonstrate Lighting System Diagnosis and Repair, Electrical-Demonstrate Accessories System Diagnosis and Repair, Engines, General Engines, Engines-Diagnosis and Repair of Cylinder Head and Valve Train, and Engine Performance-General Engine Diagnosis. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Automotive Technology MLR-4: *AUTO-TECH MLR4 163700*

Grades 11-12

1 credit/1 semester

Automotive Technology MLR-4 completes the concentration with skills sets in the areas of Engine Performance-Computerized Engine Controls; Engine Performance-Fuel, Air Induction, and Exhaust Systems Diagnosis and Repair; Engine Performance-Emissions Control Systems Diagnosis and Repair; Automatic Transmission and Transaxle-Diagnosis Maintenance, and Adjustment; Manual Drive Train and Axles-Diagnosis, Maintenance, and Adjustment; and Heating and Air Conditioning-Diagnosis, Maintenance, and Adjustment. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Second year p.m. only

Automotive Technology AST-1: *AUTO-TECH AST1 162900*

Grade 12

1 credit/1 semester

The Skill Sets in Automotive Technology AST-1 will introduce students to the skills sets related to Electrical-System Basics; and Alternative Fuels-Hybrid Vehicles; NAFTC Program or Additional Electrical Tasks from NATEF MAST Program. This course is recommended as an Elective in Automotive Technology.

Automotive Technology AST-2: *AUTO-TECH AST2 163300*

Grade 12

1 credit/1 semester

The Skill Sets in Automotive Technology AST-2 will concentrate on the skills sets related to Steering and Suspension; and Brakes. This course is recommended as an Elective in Automotive Technology.

Automotive Technology AST-3: *AUTO-TECH AST3 163500*

Grades 12

1 credit/1 semester

The Skill Sets in Automotive Technology AST-3 will introduce students to Engines-General Engines: Engine Diagnosis; Removal and Re-installation (R&R); Engines-Diagnosis and Repair of Cooling and Lubrication Systems; and Engine Performance-General Engine Diagnosis. This course is recommended as an Elective in Automotive Technology.

Automotive Technology AST-4: *AUTO-TECH AST4 162700*

Grade 12

1 credit/1 semester

The Skill Sets in Automotive Technology AST-4 will introduce students to the skills, technology, and service of Automatic Transmission and Transaxle-Diagnosis, Maintenance, Repair and Adjustment; Manual Drive Train and Axles-Diagnosis, Maintenance, Repair and Adjustment; and Heating and Air Conditioning-Diagnosis, Maintenance, Repair and Adjustment. This course is recommended as an Elective in Automotive Technology.

Diesel Equipment Technology (TR Cluster)

First year a.m. only

Fundamentals of Diesel Equipment Technology: *DSLEQ-FUND 175100* **Grades 11-12**
1 credit/1 semester

This course introduces the student to the knowledge base and technical skills as they relate to the field of Fundamentals of Diesel Equipment Technology. In the Fundamentals of Diesel Equipment Technology class areas of study include personal and shop safety, career opportunities in the diesel technology industry, the proper use of hand and power tools, basic oxyacetylene cutting, electric welding, and basic shop etiquette. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Diesel Engine Components: *DSLEQ-CMPNT 174100* **Grades 11-12**
1 credit/1 semester

This course introduces the student to the knowledge base and technical skills as they relate to the field of Diesel Equipment Technology. In the Diesel Engine Components class areas of study include basic engine components, primary functions, service, inspection, and assembly procedures. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Diesel Support Systems: *DSLEQ-SPPRT 174700* **Grades 11-12**
1 credit/1 semester

This course introduces the student to the knowledge base and technical skills as they relate to Diesel Support Systems. In the Diesel Support Systems class areas of study include areas such as lubricating and cooling systems, air intake and exhaust systems, starting and charging systems, engine retarders, fuel systems, and governor operation. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Electronic Engine Controls: *DSLEQ-ELEC CON 174400* **Grades 11-12**
1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for concepts in diesel electronic engine controls. Areas of study include electronic control modules, electronic fuel injection, and electronic control test equipment. Emphasis will be placed on career exploration, job seeking skills, and personal and professional ethics. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in

hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Second Year p.m. only

Electronic Engine Controls: *DSLEQ-ELEC CON 174400*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for concepts in diesel electronic engine controls. Areas of study include electronic control modules, electronic fuel injection, and electronic control test equipment. Emphasis will be placed on career exploration, job seeking skills, and personal and professional ethics. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Diesel Equipment Electrical Systems: *DSLEQMT ELE SYS 174200*

Grade 12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Diesel Equipment Technology concentration. Incorporated into this course are heavy truck electrical theory, engine and truck wiring circuits, storage batteries and diesel electrical system testing. This course is recommended as an Elective in Diesel Equipment Technology.

Diesel Preventive Maintenance and Inspection: *DSLEQMT MAINT 174500*

Grade 12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Diesel Equipment Technology concentration. Incorporated into this course include engine system maintenance, under hood and cab maintenance, electrical/electronic systems, frame and chassis maintenance. This course is recommended as an Elective in Diesel Equipment Technology.

Diesel Truck Chassis Concepts: *DSLEQMT TRUCK 174900*

Grade 12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Diesel Equipment Technology concentration. Incorporated into this course are elements of transmissions, clutches, suspension, steering, and air brakes. Emphasis will be placed on operating theory, removal and installation of major components, and service and inspection procedures for a career in diesel equipment technology. This course is recommended as an Elective in Diesel Equipment Technology.

Computer Systems Repair Technology (IT Cluster)

First year a.m. only

Fundamentals of computer systems: *COM SYS FUND 170500*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge and technical skills for all courses in the Computer Systems Repair Technology pathway. Areas of study include computer hardware, data representation, operating system, utility, productivity software, communications and networks and the Internet. Emphasis will be placed on personal and professional ethics and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Comptia A+ 220-801: *COMPTIA A+ 801 166400*

Grades 11-12

1 credit/1 semester

This courses introduces the knowledge required to understand the fundamentals of computer technology, networking and security, and students will acquire the skills needed to identify hardware, peripheral, networking and security components. Content Skill Sets are based on testing objectives for the CompTIA A+220801 certification. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Comptia A+ 220-802: *COMPTIA A+ 802 166500*

Grades 11-12

1 credit/1 semester

This course introduces the competencies for an entry-level IT professional who has hands-on experience in the lab or the field. Successful candidates will have the skills required to install, configure, upgrade and maintain PC workstations, the Windows OS and SOHO networks. The successful candidate will utilize troubleshooting techniques and tools to effectively and efficiently resolve PC, OS and network connectivity issues and implement security practices. Job titles in some organizations which are descriptive of the role of this individual may be: Enterprise technician, IT administrator, field service technician, PC or Support technician, etc. Content Skill Sets are based on testing objectives for the CompTIA A+ 220-802 certification. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Networking+: *NETWORKING+ 169400*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills related to networking. Areas of study include media and topologies, protocols and standards, network implementation and network support. Content Skill Sets are based on testing objectives for the CompTIA Network+ certification. Emphasis will be placed on personal and professional ethics and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Second year a.m. only

Server+: *SERVER+ 169500*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills related to working with network servers. Areas of study include server hardware, server installation, server configuration, server upgrade, proactive maintenance, security and environmental issues, troubleshooting, and disaster recovery. Emphasis will be placed on personal and professional ethics and students will explore a variety of career opportunities. This course is recommended as an **Elective** in the Computer Systems Repair Technology concentration. Content Skill Sets are based on testing objectives for the Server+ Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to occupations in computer repair and networking. Students are encouraged to become active members of the student organization, SkillsUSA. Safety instruction is integrated into all activities.

Security+: *NETSEC+ 169600*

Grade 12

1 credit/1 semester

This course introduces the students to the knowledge base and technical skills related to working with network security. Areas of study include Network Security, Compliance and Operational Security, Threats and Vulnerabilities, Application, Data and Host Security, Access Control and Identity Management and Cryptography. Courses are aligned with CompTia standards. Emphasis will be placed on personal and professional ethics and students will explore a variety of career opportunities. This course is recommended as an **Elective** in the Computer Systems Repair Technology concentration. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to occupations in computer repair and networking. Students are encouraged to become active members of the student organization, SkillsUSA. Safety instruction is integrated into all activities.

Wireless Networking Essentials: *NET-TECHWNE 169700*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills to install, maintain, repair and troubleshoot the hardware and software functionality of RFID products. Areas of study include interrogation zone basics, testing and troubleshooting, standards and regulations, tag knowledge, design selection, installation, site analysis, RF physics and RFID peripherals. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. This course is recommended as an **Elective** in the Computer Systems Repair Technology concentration. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to occupations in networking. Students are encouraged to become active members of the student organization, SkillsUSA. Safety instruction is integrated into all activities.

Work-based Integration and Transition: WKBD INTE/TRAN 0520CS

Grade 12

1 credit/1 semester

This course gives students the opportunity to integrate theory and practice by interacting with industry professionals. Students will study various requirements for employability including ethics, communication, teamwork and professionalism. Students will participate in hands-on, digital or work-based experiences related to industry settings in order to practice skill sets and to transition from student to employee. A supervised project will be developed in one or more of the following categories: Entrepreneurship (ownership or operation of a business); Placement (employment or internship); Research and Experimentation (planning and/or conducting a scientific experiment); Exploration (exploration of related careers through activities such as shadowing employees in various work settings, conducting on-line research, attending professional development activities, etc.). Students will develop materials to supplement their Simulated Workplace portfolios.

Robotics (MA Cluster)

*This is only offered in the p.m.

Robotics Rec 1: ROBOTICS REC 1 186600

Grades 11-12

1 credit/1 semester

REC 1 includes an introduction to Robotics and to VEX programming. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of a student organization, SkillsUSA West Virginia. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Robotics Rec 2: ROBOTICS REC 2 186700

Grades 11-12

1 credit/1 semester

In REC 2, students build and program the BaseBot, then use it to conduct experiments demonstrating physics and mechanical properties, adding sensors and mechanism. REC 1 concludes with a capstone project featuring competitive instructional strategies. Students

utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of a student organization, SkillsUSA West Virginia. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Robotics Rec 3: *ROBOTICS REC 3 186800*

Grades 11-12

1 credit/1 semester

In REC 3, students continue with deeper engineering topics, building more advanced robots. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of a student organization, SkillsUSA West Virginia. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Robotics Rec 4: *ROBOTICS REC 4 186900*

Grades 11-12

1 credit/1 semester

In REC 4, students are engaged in a Capstone project: Bucket Battle. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of a student organization, SkillsUSA West Virginia. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

CEM: Chemical Energy & Mechanical Technologies

First year a.m. only

Basic Production Mechanics: *BASIC PROC MECH 249700*

Grades 11-12

1 credit/1 semester

This is a core course for the Oil and Gas Extraction and Distribution concentration that builds a knowledge base and technical skills in the mechanical aspects of the industry. Topics include: NCCER Core, Masonry, Fasteners, Tubing and Threaded Pipe, Electrical systems, and welding. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members in the appropriate CTSO. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Fundamentals of Energy Systems: *245000*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for entry level skills in industrial Electrical Maintenance. Areas of study include basic electrical theory and calculations, electrical tools, instruments and safety, electrical symbols and diagrams, industrial power and control circuits, electrical equipment and devices, electrical motors, and an introduction to programmable logic controllers, as applied in industrial locations. Emphasis will be placed on career exploration, job seeking skills, and personal and professional ethics. Safety

instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Advanced Production Mechanics: *ADV PROD MECH 249600*

Grades 11-12

1 credit/1 semester

This is a core course for the Oil and Gas Extraction and Distribution concentration that builds a knowledge base and technical skills in the more advanced mechanical aspects of the industry. Topics include: Pneumatics, Hydraulics, Metering devices and provers, Pumps, Gas compressors, Bearings and seals, Valves, Threaded pipe fabrication, Materials handling, Basic Rigging, Oxy-Fuel cutting, Motorized, and Forklifts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members in the appropriate CTSO All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Chemical Process Control: *244900*

Grades 11-12

1 credit/1 semester

No description available at this time.

Second year p.m. only

Fundamentals of Electrical Maintenance for CEM: *INDEQ-ELEC 187100*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for entry level skills in industrial Electrical Maintenance. Areas of study include basic electrical theory and calculations, electrical tools, instruments and safety, electrical symbols and diagrams, industrial power and control circuits, electrical equipment and devices, electrical motors, and an introduction to programmable logic controllers, as applied in industrial locations. Emphasis will be placed on career exploration, job seeking skills, and personal and professional ethics. Safety instruction is integrated into all activities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Work Based Integration & Transition: *WKBD INTE/TRAN 0520CE*

Grade 12

1 credit/1 semester

This course gives students the opportunity to integrate theory and practice by interacting with industry professionals. Students will study various requirements for employability including ethics, communication, teamwork and professionalism. Students will participate in hands-on, digital or work-based experiences related to industry settings in order to practice skill sets and to transition from student to employee. A supervised project will be developed in one or more

of the following categories: Entrepreneurship (ownership or operation of a business); Placement (employment or internship); Research and Experimentation (planning and/or conducting a scientific experiment); Exploration (exploration of related careers through activities such as shadowing employees in various work settings, conducting on-line research, attending professional development activities, etc.). Students will develop materials to supplement their Simulated Workplace portfolios.

Advanced Production Mechanics: *ADV PROD MECH 249600*

Grade 12

1 credit/1 semester

This is a core course for the Oil and Gas Extraction and Distribution concentration that builds a knowledge base and technical skills in the more advanced mechanical aspects of the industry. Topics include: Pneumatics, Hydraulics, Metering devices and provers, Pumps, Gas compressors, Bearings and seals, Valves, Threaded pipe fabrication, Materials handling, Basic Rigging, Oxy-Fuel cutting, Motorized, and Forklifts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members in the appropriate CTSO All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Chemical Process Control: *244900*

Grade 12

1 credit/1 semester

No description available.

Carpentry (AR Cluster)

First year a.m. only

Carpentry I: *CARPENTRY I 184200*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills of the carpentry industry. Carpentry I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students will complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students will then begin developing skill sets related to the fundamentals of Carpentry such as Orientation to the Trade; Building Materials, Fasteners, and Adhesives; and Hand and Power Tools. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Carpentry II: *CARPENTRY II 184300*

Grades 11-12

1 credit/1 semester

Carpentry II will continue to build student skill sets in areas such as Reading Plans and Elevations; Floor Systems, Wall and Ceiling Framing; Roof Framing; Introduction to Concrete,

Reinforcing Materials, and Forms; Windows and Exterior Doors; Basic Stair Layout. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Carpentry III: *CARPENTRY III 184400*

Grades 11-12

1 credit/1 semester

Carpentry III will continue to build student skill sets in areas of Commercial Drawings; Roofing Applications; Thermal and Moisture Protection; and Exterior Finishing. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Carpentry IV: *CARPENTRY IV 184500*

Grades 11-12

1 credit/1 semester

Carpentry IV will continue to build student skill sets in areas of Cold-Formed Steel Framing; Drywall Installation; Drywall Finishing; Doors and Door Hardware; Suspended Ceilings; Window, Door, Floor, and Ceiling Trim; Cabinet Installation; and Cabinet Fabrication. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Second year p.m. only

Building Construction Applications: *BLPRT RDG CNSTR 182800*

Grade 12

1 credit/1 semester

No description available.

Residential Wiring: *ELEC-RESID WIRE 176900*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for Residential Wiring. Areas of study include wiring data, service entrance equipment, luminary and receptacle outlets, protective devices, appliance and special circuits and low-voltage systems. Emphasis will be placed on career exploration, job seeking skills and personal and professional ethics. Safety instruction is integrated into all activities. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts.

Masonry and Plumbing: *BLDCNS-MASONRY 182900***Grade 12**

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for concepts in the Building Construction Concentration. Areas of study include estimation, masonry materials, rough in plumbing systems and installation of finish plumbing. Emphasis will be placed on career exploration, job seeking skills and personal and professional ethics. Safety instruction is integrated into all activities. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts, and teachers should provide each student with real world learning opportunities and instruction related to masonry and plumbing.

Work Base Integration & Transition: *WKBD INTE/TRAN 0520CA***Grade 12**

1 credit/1 semester

This course gives students the opportunity to integrate theory and practice by interacting with industry professionals. Students will study various requirements for employability including ethics, communication, teamwork and professionalism. Students will participate in hands-on, digital or work-based experiences related to industry settings in order to practice skill sets and to transition from student to employee. A supervised project will be developed in one or more of the following categories: Entrepreneurship (ownership or operation of a business); Placement (employment or internship); Research and Experimentation (planning and/or conducting a scientific experiment); Exploration (exploration of related careers through activities such as shadowing employees in various work settings, conducting on-line research, attending professional development activities, etc.). Students will develop materials to supplement their Simulated Workplace portfolios.

Welding Technology (MA Cluster)**First year a.m. only****Welding I: *WELDING I 186200*****Grades 11-12**

1 credit/1 semester

This course is designed to introduce the student to the knowledge base and technical skills of the Welding industry. Welding I begins with the NCCER Core curriculum which is a prerequisite to all Level I completions. The students will complete modules in Basic Safety; Introduction to Construction Math; Introduction to Hand Tools; Introduction to Power Tools; Introduction to Construction Drawings; Basic Rigging; Basic Communication Skills; Basic Employability Skills; and Introduction to Materials Handling. Students will then begin developing skill sets in the fundamentals of Welding such as Welding Safety; Oxyfuel Cutting; and Plasma Arc Cutting. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding II: *WELDING II 186300***Grades 11-12**

1 credit/1 semester

Welding II will continue to build student skill sets in areas of Air Carbon Arc Cutting and Gouging; Base Metal Preparation; Weld Quality; SMAW-Equipment and Setup; Shielded Metal Arc Electrodes; SMAW-Beads and Fillet Welds; Joint Fit Up and Alignment; SMAW-Groove Welds with Backing; and SMAW-Open V-Groove Welds. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding III: WELDING III 186400

Grades 11-12

1 credit/1 semester

Welding III will continue to build student skill sets in areas of Welding Symbols; Reading Welding Detail Drawings; Physical Characteristics and Mechanical Properties of Metals; Preheating and Postheating of Metals; GMAW and FCAW-Equipment and Filler Metals; and GMAW and FCAW-Plate. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Welding IV: WELDING IV 186500

Grades 11-12

1 credit/1 semester

Welding IV will continue to build student skill sets in areas of GTAW-Equipment and Filler Metals; and GTAW-Plate. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Second year p.m. only

Gas Tungsten Arc Welding: WELD-GAS TNG 198900

Grade 12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Welding concentration. Incorporated into this course are elements of introductory knowledge and skills necessary for a career in welding. This course is recommended as an Elective in Metals Technology and Welding

Blueprint Reading and Metallurgy: WELD-BLPRT RD 198300

Grades 11-12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Education Welding concentration. Areas of study include drawing

fundamentals, sketching and fabricating, basic welding symbols, and properties of metals and alloys. This course is recommended as an Elective in the Welding concentration.

Gas Metal Arc Welding: *WELD-ARC 198700*

Grades 11-12

1 credit/1 semester

The Skill Sets in this course are representative of the basic knowledge included in a Career and Technical Welding concentration. Incorporated into this course are elements of introductory knowledge and skills necessary for a career in welding. This course is recommended as an Elective in Metals Technology and Welding.

Ornamental Metalwork: *WELD-ARNMENT 198200*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for concepts in the Ornamental Metal Work. Areas of study include measurement, metal layout and bending, operation of the drill press, band saw, and the iron worker. Incorporated into this course are elements of introductory knowledge and skills necessary for a career in welding. This course is recommended as an Elective in Welding.

Drafting (AR Cluster)

First year a.m. only

Fundamentals of Drafting: *CMPDRFT-FUND 172900*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills for all courses in the Drafting concentration. Areas of study include tools and equipment, measurement, basic drafting techniques, freehand technical sketching, orthographic projection, dimensioning, basic computer skills, and drawing techniques. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Drafting Techniques: *CMPDRFT-TCHQ 172700*

Grades 11-12

1 credit/1 semester

This course introduces the student to techniques used in advanced orthographic projection. Areas of study include sectioning, pictorial views, auxiliary views, patterns and developments, dimensioning, advanced 2D CAD techniques, and basic 3D modeling in CAD. Students will demonstrate knowledge and technical expertise in various fundamental drafting techniques. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, WV SkillsUSA. All West Virginia teachers are responsible for

classroom instruction that integrates learning skills, technology tools, and skill sets

Mechanical Drafting: *CMPDRFT-MECH 172500*

Grades 11-12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills necessary for mechanical drafting. Areas of study include advanced dimensioning techniques, assembly drawings, threads and fasteners, gears and cams, welding, and basic solid modeling. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Architectural Drafting: *CMPDRFT-ARCH 172100*

Grades 11-12

1 credit/1 semester

This course introduces students to the specialization of architectural drawing and design. Areas of study include architectural styles, floor plans, dimensioning and annotation, site and foundation plans, elevations and section layouts, and residential utilities. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Second year p.m. only

Architectural Drafting: *CMPDRFT-ARCH 172100*

Grade 12

1 credit/1 semester

This course introduces students to the specialization of architectural drawing and design. Areas of study include architectural styles, floor plans, dimensioning and annotation, site and foundation plans, elevations and section layouts, and residential utilities. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Computer Aided Drafting: *CMPDRFT ADV 172800*

Grade 12

1 credit/1 semester

No description available.

Mechanical Drafting: *CMPDRFT-MECH 172500*

Grade 12

1 credit/1 semester

This course introduces the student to the knowledge base and technical skills necessary for mechanical drafting. Areas of study include advanced dimensioning techniques, assembly drawings, threads and fasteners, gears and cams, welding, and basic solid modeling. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Piping System Drafting: *CMPDRFT PIPE 172200*

Grade 12

1 credit/1 semester

No description available.

Law & Public Safety (LA Cluster)

Law Enforcement Emphasis a.m. only

Fundamentals of Public Safety Leadership: *FD PUB SFTY LDSP 1225LE*

Grade 11-12

1 credit/1 semester

This course is designed to present foundational principles of Public Safety Leadership including; how public safety leaders protect a democratic society; public policy issues such as crime and justice; history, organization and functions of components of public safety including the criminal justice system; and the issues and challenges relating to the administration of justice in a culturally diverse society. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Ethical Issues in Public Safety: *ETHL ISS PUB SFTY 1226LE*

Grade 11-12

1 credit/1 semester

This course is designed to examine the philosophical issues and applications of the objectives and processes of Public Safety Leadership including; Constitutional limitations; accountability; civil liability; criminal investigation; criminal procedure; and forensics. By examining societal and psychological stressors that contribute to behavior, students will examine a variety of 10 serious offenses and apply concepts of profiling, behavioral analysis and threat assessment within an ethical paradigm. Students will analyze and critique the system of dealing with convicted persons and the long term implications of corrections policy. The principles and procedures used in criminal investigation will be introduced. Procedures for implementing

criminal law such as the Incorporation Doctrine, search and seizure, warrant requirements, arrest, the right to counsel, interrogation, identification procedures, entrapment, cruel and unusual punishment, etc. will be discussed. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Practical Applications of Public Safety: *PR APP PUB SFTY 1039LE* **Grade 11-12**
1 credit/1 semester

This course is designed to give students the opportunity to connect theory and practice by interacting with Public Safety professionals. Students will study various requirements for employability in the Public Safety field including ethics, teamwork, and professionalism. Students may participate in activities associated with Public Safety agencies (such as county and local law enforcement, county judicial offices, correctional facilities, training academies, social services, etc.) for hands-on or work-based experiences. Preparation includes construction of a portfolio that can be utilized in obtaining employment upon completion of the student's program. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Seminar in Law Enforcement: *SEM LAW ENFORC 103500* **Grade 11-12**
1 credit/1 semester

This course is designed to provide students with fundamental principles of the law enforcement field such as the history of policing in the US, the characteristics of law enforcement agencies and types of police activities including criminal investigation. Current issues and trends in law enforcement will be investigated. Aspects of criminal investigation such as evidence collection, fingerprinting, latent dusting, interviewing and report writing will be presented. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Corrections Emphasis p.m. only

Fundamentals of Public Safety Leadership: *FD PUB SFTY LDSP 1225LE* **Grade 11-12**
1 credit/1 semester

This course is designed to present foundational principles of Public Safety Leadership including: how public safety leaders protect a democratic society; public policy issues such as crime and justice; history, organization and functions of components of public safety including the criminal justice system; and the issues and challenges relating to the administration of justice in a culturally diverse society. Students utilize problem-solving techniques and participate in

hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Ethical Issues in Public Safety: *ETHL ISS PUB SFTY 1226LE*

Grade 11-12

1 credit/1 semester

This course is designed to examine the philosophical issues and applications of the objectives and processes of Public Safety Leadership including; Constitutional limitations; accountability; civil liability; criminal investigation; criminal procedure; and forensics. By examining societal and psychological stressors that contribute to behavior, students will examine a variety of 10 serious offenses and apply concepts of profiling, behavioral analysis and threat assessment within an ethical paradigm. Students will analyze and critique the system of dealing with convicted persons and the long term implications of corrections policy. The principles and procedures used in criminal investigation will be introduced. Procedures for implementing criminal law such as the Incorporation Doctrine, search and seizure, warrant requirements, arrest, the right to counsel, interrogation, identification procedures, entrapment, cruel and unusual punishment, etc. will be discussed. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Practical Applications of Public Safety: *PR APP PUB SFTY 1039LE*

Grade 11-12

1 credit/1 semester

This course is designed to give students the opportunity to connect theory and practice by interacting with Public Safety professionals. Students will study various requirements for employability in the Public Safety field including ethics, teamwork, and professionalism. Students may participate in activities associated with Public Safety agencies (such as county and local law enforcement, county judicial offices, correctional facilities, training academies, social services, etc.) for hands-on or work-based experiences. Preparation includes construction of a portfolio that can be utilized in obtaining employment upon completion of the student's program. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Seminar in Corrections: *SEM CORRECT 103400*

Grades 11-12

1 credit/1 semester

This course is designed to provide students with fundamental principles in the corrections field including: the evolution of correctional practices and philosophies including treatment models; correctional law; the relationship of correctional activities to other aspects of the criminal justice system; detention facilities; and probation and parole programs. The differences

between levels of security and characteristics of offenders (such as gender and age) and the development of inmate cultures will be examined. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Students are encouraged to become active members of the student organization SkillsUSA. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Information Management (IT Cluster)

a.m. only

Digital Imaging/Multimedia I: *DGTL IMG/MLT I 143100*

Grades 11-12

1 credit/1 semester

This course is designed to develop student knowledge and skills in such areas as producing images, operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Bus Cmptr App I MS Word & MS Powerpoint: *BUS CMPTR IMS 1411E0*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as Microsoft Word and Microsoft Excel. This course prepares students for the Microsoft Word Office Specialist Exam and for the Microsoft Excel Office Specialist Exam. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, DECA or FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Digital Imaging/Multimedia II: *DGTL IMG/MLT II 143200*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as imaging, drawing, animation and video software which will be used to create advanced projects. These projects will involve advanced tools and techniques of each discipline. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Webpage Publishing: *WEBPGE PBLSH 145500*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as Web page design including using Web page development software, creating page layouts, adding images and frames, creating elements and components, creating tables, managing files, publishing to the Internet, creating hyperlinks, organizing tasks and using codes (markup languages). Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Management & Administrative Support (BM Cluster)

p.m. only

Business and Marketing Essentials: *BUS MKT ESSTL 143900*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resources management, information management, marketing, operations, professional development and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies and participate in career planning. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, DECA or FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Personal Finance: *PERSONAL FINANCE 145100*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas such as money management, budgeting, financial goal attainment, credit, insurance, investments and consumer rights and responsibilities. The course culminates in a personal financial literacy workshop requiring students to share their knowledge with others. This course features a variety of activities, assessments (including multiple-choice test items) and resource lists for instructional use. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organizations, DECA or FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Marketing Principles: *MKT-PRIN 042200*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as channel management, marketing-information management, market planning, pricing, product/service management, promotion and selling. Through the use of projects, students acquire an understanding and appreciation of marketing activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and Instruction. Students are encouraged to become active members of the student organizations, DECA or FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Workplace Practicum: *WRKPLC PRACT 151200*

Grades 11-12

1 credit/1 semester

This course is designed to develop student understanding and skills in such areas as the elements of basic work knowledge and skills necessary to participate in a workplace practicum in the business and marketing field. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Allied Health Sciences EMT-B (HE Cluster)

a.m. only

Foundations of Health Science: *FOUND HLTH SCI 0711EM*

Grades 11-12

1 credit/1 semester

This course is designed to allow instructional content to focus on basic medical terminology, growth and development, nutrition, health maintenance practices and healthcare delivery systems. It is designed to provide the student with knowledge and technical skills required for infection control and the prevention of disease transmission, CPR and First Aid. Students will be provided with the opportunity to acquire certification in these areas. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Emergency Services 1: *EMERG SRV 1 079200*

Grades 11-12

1 credit/1 semester

EMT-B is recognized by the United States Department of Transportation. Instructional content will focus upon expanded and enhanced biology content specific to human structure, function and diseases/disorders common to medical and traumatic emergencies. In addition, course content will include treatment and care of the sick or injured, methods and techniques of

patient assessment and of gaining access to the patient, stabilization and transport. Skills necessary for proper documentation are integrated throughout the course. According to national criteria, students must successfully complete a mid-course exam, with a minimum core of 80%, in order to continue in the course and maintain eligibility to take the national EMT-B exam. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and content skill sets.

Advanced Principles of Health Science: *AD PRIN HLTH SCI 0715EM* **Grades 11-12**
1 credit/1 semester

Instructional content will focus on healthcare safety, environmental safety processes and procedures, ethical and legal responsibilities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course. Instruction will incorporate project and problem based healthcare practices and procedures to demonstrate the importance of these skills. Students will develop basic technical skills required for all health career specialties including patient privacy, communication, teamwork and occupational safety and be provided with opportunities to obtain certifications in HIPPA/Data Privacy and health care safety. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Science Clinical Experience: *SCI CLNL EXP 0730EM* **Grades 11-12**
1 credit/1 semester

This course is designed to be used in conjunction with a Health Science Education course that includes a clinical specialization experience. Instructional content focuses on extending career preparation and technical skills associated with a previously selected clinical specialization. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Therapeutic Services (HE Cluster)

Health Science I a.m. only

Foundations of Health Science: *FOUND HLTH SCI 0711TS* **Grades 11-12**
1 credit/1 semester

This course is designed to allow instructional content to focus on basic medical terminology, growth and development, nutrition, health maintenance practices and healthcare delivery systems. It is designed to provide the student with knowledge and technical skills

required for infection control and the prevention of disease transmission, CPR and First Aid. Students will be provided with the opportunity to acquire certification in these areas. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Certified Nursing Assistant: *CLINICAL SPCL I 078900*

Grades 11-12

1 credit/1 semester

Upon successful completion of the prerequisite courses in the Health Science Education concentration, students will be provided the opportunity in Clinical Specialty I to participate in a work-based clinical experience. Students choose a health career specialty for in-depth study and must complete a minimum of 25-55 hours in an applicable clinical rotation. Instruction is guided by career-specific Content skill sets that must be mastered before students are eligible to attain established credentials and/or industry validation. Within this course, students focus upon employability skills and career development, and apply healthcare information technology and technical skills. Instruction will incorporate project and problem-based healthcare practices and procedures to demonstrate the criticality of these skills. Due to healthcare industry standards, exemplary attendance is mandatory. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Advance Principles of Health Science: *AD PRIN HLTH SCI 0715TS*

Grades 11-12

1 credit/1 semester

Instructional content will focus on healthcare safety, environmental safety processes and procedures, ethical and legal responsibilities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course. Instruction will incorporate project and problem based healthcare practices and procedures to demonstrate the importance of these skills. Students will develop basic technical skills required for all health career specialties including patient privacy, communication, teamwork and occupational safety and be provided with opportunities to obtain certifications in HIPPA/Data Privacy and health care safety. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Advanced Health Seminar: *CLINICAL SPCL II 079000*

Grades 11-12

1 credit/1 semester

Upon successful completion of the prerequisite courses in the Health Science Education

concentration, students will be provided the opportunity in Clinical Specialty II to participate in a work-based clinical experience. Students choose a health career specialty for in-depth study and must complete a minimum of 25-55 hours in an applicable clinical rotation. Instruction is guided by career-specific Content skill sets that must be mastered before students are eligible to attain established credentials and/or industry validation. Within this course, students focus upon employability skills and career development, and apply healthcare information technology and technical skills. Instruction will incorporate project and problem-based healthcare practices and procedures to demonstrate the criticality of these skills. Due to healthcare industry standards, exemplary attendance is mandatory. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Allied Health Sciences Medical Assisting (HE Concentration)

p.m. only

Foundations of Health Science: *FOUND HLTH SCI 0711MA*

Grade 12

1 credit/1 semester

This course is designed to allow instructional content to focus on basic medical terminology, growth and development, nutrition, health maintenance practices and healthcare delivery systems. It is designed to provide the student with knowledge and technical skills required for infection control and the prevention of disease transmission, CPR and First Aid. Students will be provided with the opportunity to acquire certification in these areas. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Medical Assistant Lab and Diagnostic Procedures: *MED LB DX PR 073700* **Grade 12**

1 credit/1 semester

Instructional content will focus on an introduction to the medical laboratory, safety, principles of disease transmission and prevention, as well as medical and surgical asepsis. Students will obtain the knowledge and skills necessary to assist and/or perform basic laboratory and diagnostic procedures. With participation and input of therapeutic services professionals, instructional content will incorporate project and problem-based therapeutic practices and procedures to demonstrate the criticality of these skills. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and content skill sets.

Advance Principles of Health Science: AD PRIN HLTH SCI 0715MA**Grade 12**

1 credit/1 semester

Instructional content will focus on healthcare safety, environmental safety processes and procedures, ethical and legal responsibilities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course. Instruction will incorporate project and problem based healthcare practices and procedures to demonstrate the importance of these skills. Students will develop basic technical skills required for all health career specialties including patient privacy, communication, teamwork and occupational safety and be provided with opportunities to obtain certifications in HIPPA/Data Privacy and health care safety. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

Medical Assistant Clinical Procedures: MED CLIN PR 073300**Grade 12**

1 credit/1 semester

Instructional content in this will focus on clinical procedures utilized within medical offices. Major components include emergency medical care, physical exam, basic pharmacology and administration of medication. Students will focus upon employability strategies and career development necessary for successful employment. Students will participate in a work-based clinical externship within a medical office or equivalent health care facility. Due to health care industry standards, exemplary attendance is mandatory. All content skill sets must be mastered before students are eligible to attain established credentials and/or industry validation. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and content skill sets.

Allied Health Science PTCB Preparation (HE Cluster)**p.m. only****Foundations of Health Science: FOUND HLTH SCI 0711PT****Grade 12**

1 credit/1 semester

This course is designed to allow instructional content to focus on basic medical terminology, growth and development, nutrition, health maintenance practices and healthcare delivery systems. It is designed to provide the student with knowledge and technical skills required for infection control and the prevention of disease transmission, CPR and First Aid. Students will be provided with the opportunity to acquire certification in these areas. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student

organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

PTCB Preparation/Clinical: *PTCB PREP 077100*

Grade 12

1 credit/1 semester

The PTCB Preparation class prepares the student to participate in a clinical internship in PTCB Clinical Applications. Instructional focus is on a self-paced curriculum provided by PassAssured's Pharmacy Technician Training Program, Pass Assured, LLC. This curriculum is supported by teacher instruction and a variety of textbook and online resources. Using a modular format, this system allows the student to gain the knowledge and skills required for certification and entry level employment as a Pharmacy Technician. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and content skill sets.

Advance Principles of Health Science: *AD PRIN HLTH SCI 0715PT*

Grade 12

1 credit/1 semester

Instructional content will focus on healthcare safety, environmental safety processes and procedures, ethical and legal responsibilities and mathematical computations. Medical terminology and the reinforcement, expansion and enhancement of biology content specific to diseases and disorders are an integral part of the course. Instruction will incorporate project and problem based healthcare practices and procedures to demonstrate the importance of these skills. Students will develop basic technical skills required for all health career specialties including patient privacy, communication, teamwork and occupational safety and be provided with opportunities to obtain certifications in HIPPA/Data Privacy and health care safety. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and Content skill sets.

PTCB Clinical Applications: *PTCB CLN APP 077200*

Grade 12

1 credit/1 semester

Students will be provided an opportunity to participate in a clinical internship, applying the knowledge and skills mastered during the PTCB Preparation course. The clinical internship will allow hands-on practice under the direction of a pharmacist. Students participate in 100-130 hours of activities that reflect current and future entry-level pharmacy technician functions and responsibilities, utilizing both the institutional and retail settings. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization, HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and content skill sets.

Therapeutic Services (HE Cluster)

Health Science II p.m. only

Medical Terminology: *MED TERMNLGY 072100*

Grade 12

1 credit/1 semester

Through the study of medical terminology, the student will be introduced to the language of medicine. Students will gain an understanding of basic elements, rules of building and analyzing medical words, and medical terms associated with the human body utilizing a systems approach. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

ECG/Phlebotomy: *ECG/PHLEB 072000*

Grade 12

1 credit/1 semester

Upon successful completion of this course, students will master competencies consistent in the areas of ECG Technician and Phlebotomist. Students utilize problem-solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Body Structures and Functions: *BOD STR FUNC 071600*

1 credit/1 semester

This course focuses on the structure and function of each system in the human body. Additional instructional components include concepts that pertain to the body as a whole, applicable medical terminology and the pathophysiology common to each system. Students utilize problem solving techniques and participate in hands-on activities to develop an understanding of course concepts. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Science Clinical Experience: *SCI CLNL EXP 0730EM*

Grade 12

1 credit/1 semester

This course is designed to be used in conjunction with a Health Science Education course that includes a clinical specialization experience. Instructional content focuses on extending career preparation and technical skills associated with a previously selected clinical specialization. Teachers should provide each student with real world learning opportunities and instruction. Students are encouraged to become active members of the student organization HOSA-Future Health Professionals. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.