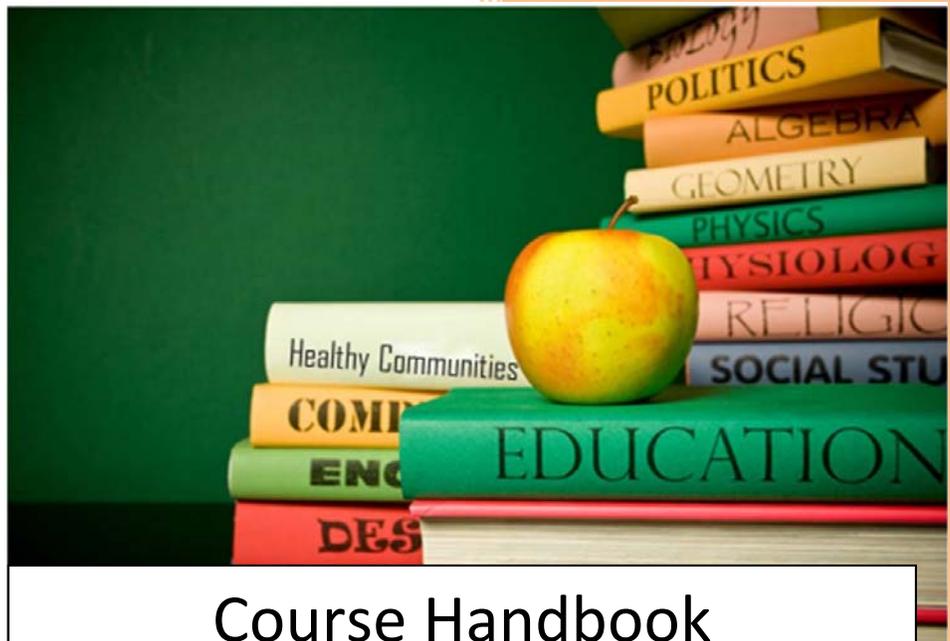


2016 -2017

Mason County Schools



Course Handbook

Mason County Schools
1200 Main Street
Point Pleasant WV 25550
304-675-4540

12/1/2015

Chart IV Graduation Requirements are effective for all students enrolled in school year 2014 – 2015, and thereafter or as otherwise specified. Courses needed for graduation require a mastery of approved content standards and objectives. Students should consult with their chosen postsecondary educational program when choosing optional upper-level courses. Students who do not demonstrate mastery of the approved contents standards and objectives shall be provided extra assistance and time through personalized learning and support.

Graduation Requirements (18 credits prescribed)	
English Language Arts¹	4 credits
Mathematics²	4 credits
Science	3 credits
Social Studies³	4 credits
Physical Education	1 credit
Health	1 credit
The Arts	1 credit
Electives	2 credits The remaining graduation requirements are to be electives.
Personalized Education Plan	4 Credits – Each student’s PEP will identify course work for the four (4) credits that will lead directly to placement in entry-level, credit-bearing academic college courses, an industry-recognized certificate or license, or workforce training programs. Best practices encourage students to take at least 1 AP® and/or AC course with corresponding examination, a fourth Science credit, and 2 credits in one World Language, and/or four credits cumulating in acquisition of industry and recognized Career and Technical Education (hereinafter CTE) credential focused on career aspirations.
Career and Technical Education (CTE)	The four credits taken in a career and technical concentration must be consistent with those identified for WVDE, approved career and technical programs of study. (Refer to W.Va. 126CSR44M, Policy 2520.13: Common Core Content Standards for Career and Technical Education in West Virginia Schools.) Each career and technical concentration in a school shall provide students the opportunity to obtain an industry recognized credential as part of the instructional program when applicable.
World Languages	Communicating in a global society requires students to apply appropriate language strategies through embedded opportunities to explore and gain an understanding of the world around them. Undergraduate admission to WV four-year colleges and universities include the completion of two units of the same world language.
Senior Year	All West Virginia High School students shall be fully enrolled in a full day of high school and/or college credit bearing courses. It is recommended that students complete a senior project to add rigor and relevance to the senior year. The senior project is built into the English 12 College and Career Ready Course (English 12 CR) and no additional senior project is recommended for the students enrolled in this course.

¹ Because of the progression of the standards within courses, the intent is that students take English courses annually in sequence. English 12 College and Career Ready must be offered annually and will be counted as an English 12 credit. Students in the professional pathway and college-bound students in the skilled pathway who are borderline in terms of meeting the college and career ready benchmark, according to multiple data as indicated by the placement guidance form, may choose to take, or may be required to take, the English 12 CR course during the 12th grade year. Consideration will be given to English Language Arts performance on previous assessments and successful completion of previous English courses to allow students who do not meet the college and career benchmarks to have appropriate English 12 course options. Students who take the English 12 CR course will take an end-of-course assessment to provide timely feedback on their readiness for college entry level course work. The end of course assessment will align with the WV HEPC Series 21 Freshman Readiness Assessment and Placement Standards and the results will be considered during student placement into credit-bearing college English courses with ACT and SAT taking precedence. English 12 CR will count toward eligibility for PROMISE scholarships and is accepted by NCAA. Students opting to take a higher level English course are exempt from taking English 12 CR.

² Students in both professional and skilled pathways will take mathematics annually in grades 9-12. The recommended course sequence, which may include college courses, AP® courses, IB courses, or virtual school courses, for students in the professional pathway is Algebra I or Math I, Geometry, Algebra II, Trigonometry, and Pre-Calculus. The recommended course sequence in the skilled pathway is Algebra I or Math I, Geometry, Conceptual Mathematics, and Transition Mathematics for Seniors or Algebra II. Students enrolled in Math I will continue through high school with the Next Generation Content Standards and Objectives sequence options and will not have the option of returning to the 21st Century Content Standards and Objectives course sequence beginning with Algebra. Transition Mathematics for Seniors must be offered annually and will be counted as a mathematics credit. Students in the professional pathway and college bound students in the skilled pathway, who do not achieve the state assessment college and career Readiness Benchmark (CCRB) for mathematics, may be required to take the Transition Mathematics for Seniors course their twelfth grade year. Consideration will be given to mathematics performance on previous assessments and completion of mathematics courses to allow students who do

not meet the CCRB to have other mathematics course options. Students who take the Transition Mathematics for Seniors course will take an end-of-course assessment to provide timely feedback on their readiness for college and career. The end-of-course examination will align with the WVHEPC's Series 21 Freshmen Readiness Assessment and Placement Standards and the results will be considered for placement into a credit-bearing college mathematics course.

Because of the extreme importance of mastery of the Algebra I or Math I content standards and objectives (CSOs), students who need additional time to master Algebra I CSOs or the Math I CSOs may be identified at the local level using a data-based decision making process. Students who need additional time for Algebra I CSO and Math I CSO mastery should complete the recommended math course sequence at a pace that is consistent with their ability levels. Research indicates the best option for scheduling additional time is to do so within the same year. Counties continuing with the scheduling sequence that begins with Algebra I may continue to place students who need extra time into two separate math courses to master Algebra course content and grant students up to two math credits toward graduation upon successful course completion. Because the combination of a Math I course and a Math I Lab are designed to ensure mastery of the content represented by one high school mathematics course, Math I, counties may grant one mathematics credit toward graduation and one elective credit for the lab experience. It is further required that students be enrolled in at least one math course each year in high school.

³. Students shall take the high school social studies courses in the listed sequence to ensure maximum understanding of the material to be covered and alignment of the content and State Assessment. World Studies, United States Studies, Contemporary Studies and Civics for the Next Generation shall be taken in consecutive order. When substituting AP® courses students should take AP® World History and AP® US History courses in place of two of their required courses. Students may substitute AP® European History or AP® Human Geography as a third required course in grades 9-11. The senior course, Civics for the Next Generation, has been written to deliver rich academic content within relevant context for students entering the world of work, college and citizenship; therefore, the only acceptable substitute for this course is AP® Government and Politics.

CONTENTS

English / Language Arts	5
Social Studies	7
Mathematics	9
Science	10
Foreign Language	13
The Arts	13
Health & Physical Education	18
Other Offerings & Opportunities	18
Career Information	19
General Information	19
College Enrollment in High School	19
Marshall University Requirements	19
Marshall Community and Technical College Requirements	20
Overview of Career Clusters	20
Mason County Schools Career and Technical Education Program Area	21

ENGLISH/ LANGUAGE ARTS

English 9

(Course Code: 400932)

Reading and English Language Arts for ninth grade students will focus on the effective use of written language in educational and occupational endeavors and interpersonal communications. Instructional delivery will be enhanced through a wide range of information media and the interpretation of media communication. Frequent interaction with a broad array of quality literature and informational texts will encourage an appreciation for the power of the written and spoken word. All reading, writing, speaking, listening and media literacy skills and strategies will be utilized across the curriculum. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. **Note: Honors English 9 is also available. Interested students should discuss prerequisites with their counselors.**

English 10

(Course Code: 401032)

Reading and English Language Arts for tenth grade students will use written language for educational, occupational and self-direction endeavors. Preparation will include critiquing and evaluating oral presentations and using listening, speaking and media literacy. Instructional delivery will be enhanced by a wide variety of media. Frequent interaction with a broadened array of literature will encourage an increased appreciation and understanding for the power of the spoken and written word across the curriculum. Tenth graders will become more adept at making connections and transferring knowledge to new situations through research and writing. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. **Note: Honors English 10 is also available. Interested students should discuss prerequisites with their counselors.**

English 11

(Course Code: 401132)

Reading and English Language Arts for eleventh grade students will refine and enhance foundational literary and information and communication skills through academic rigor and depth. School-to-career experiences, including college entrance exam preparation and the ability to think, speak and write logically in the workplace will become primary focus. Challenging research and writing skills will be emphasized across the curriculum. The inclusion of higher order thinking skills, communication skills, self-direction and creative thinking in the curriculum will be used to enable students to effectively build content knowledge. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. **Note: English 11 Advanced Placement is available in the county or through virtual school, (check with your counselor; it is a rigorous college level), students who choose to enroll are strongly encouraged to take the AP test.**

English 12

(Course Code: 401232)

Reading and English Language Arts for twelfth grade students will focus and polish personal skills and goals. Experiences such as a senior project or a sophisticated persuasive research paper will culminate the graduation experience. Evaluation, analysis and appreciation of language and literature in spoken and written form will be the primary focus. Readiness for the work place, by thinking creatively and logically to solve problems and using tools that are essential for workplace productivity, and post secondary education is the final educational reality check during the twelfth grade year. To meet the needs of the 21st century student, instructional delivery should be enhanced through a wide range of media. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. **Note: completion of a senior project is required as part of the 12th Grade English class.**

Transition English For Seniors

(Course Code: 401332)

English 12 College/Career Ready

(Course Code: 401432)

English 12 CR is designed for students who are at Partial Mastery or the low end of Mastery, who score around 18-20 on the ACT (or equivalent on SAT) and who are identified by teachers or parents as needing support to be college and career ready by graduation. Students will take the ACT compass assessment at the end of the course. If students score proficient, they may avoid taking a lower level, non-major English course upon entrance into a West Virginia college or University. **Note: English 101 may be taken for dual credit for the required English 12.**

MU English 101

(Course Code: 40123X)

Introduction to academic writing with emphasis on writing as a multi-stage process, critical thinking and fundamental research strategies and skills.

MU English 201

(Course Code: 40124X)

Literature and composition course that builds on the writing and critical thinking skills students acquire in English 101 with an emphasis on research skills in English 201.

Advanced Placement Language Arts

(Course Code: 404132)

This is a college level course which provides the student with the skills necessary to take the National Advanced Placement exam. The course is primarily a composition course which includes both the reading and writing discursive prose. Students will examine a variety of rhetorical aims and modes which enable them to become more effective writers.

Advanced Placement Literature

(Course Code: 404232)

This is a college level course which provides the student with the skills necessary to take the National Advanced Placement exam. The course is primarily a composition course which includes both the reading and writing discursive prose. Students will examine a variety of rhetorical aims and modes which enable them to become more effective writers.

Journalism

(Course Code: 405132)

Journalism expands and enhances Reading and English Language Arts in the areas of reading, writing, speaking, listening and media literacy. Emphasis is on the oral, written, and visual communication skills important for educational, occupational and personal endeavors. A broad spectrum of skills and information is basic to all journalistic pursuits. In addition, specialized skills and information are also required for students pursuing various branches of journalism. By combining these standards and objectives, electives in journalism may include basic journalism, newspaper, yearbook, broadcasting, photojournalism, desktop publishing and public relations. These standards and objectives can be adapted for various levels, as well as for various electives. To further enhance students' journalism skills and provide leadership opportunities, continued enrollment in the journalism program is recommended. Students at different levels should demonstrate improvement in work quality and increased skill complexity. Skills learned in journalism electives will benefit students in all careers. Standards one through four apply to a general journalism and standards five through ten in addition to standards one through four, apply to specific journalism courses.

Speech/Oral Communication

(Course Code: 407632)

Speech is an elective which enhances the Reading and English Language Arts curriculum. Oral communication is fundamental to all other learning. By actively participating in a variety of speaking activities, students will gain the confidence and skills to overcome communication anxiety. A student who communicates will succeed in social, economic and academic environments. Effective oral communication provides readiness for the workplace and/or postsecondary education and is a recommended elective for students in all career majors. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

Advanced Communication

(Course Code: 402132)

This class consists of the study of interpersonal communication, non-verbal communication, and formal preparation and delivery of various kinds of speeches. Covered under these types of presentations are speeches of information, persuasion, demonstration and entertainment. Also covered within the course are debate, oral interpretation and parliamentary procedure.

Yearbook I

(Course Code: 407132)

This class is responsible for planning, designing, laying out and marketing the school yearbook. Students will learn graphic art techniques, layout design, journalism, photography and business procedures. Intensive training in computers is included.

Yearbook II

(Course Code: 407232)

Journalism Video

(Course Code: 406132)

This is intended to be an introductory course for students interested in video production. Scriptwriting, research, and reporting will be part of the course as will film and sound techniques. On-camera speaking will be an essential element for each student. Participation and completion of a video project will be part of the class.

Creative Writing I

(Course Code: 402232)

Creative Writing I is a course designed to put students in touch with their creative abilities, free their expression and have fun with writing. The class is filled with exercises that will get the creative juices flowing. The class includes finding your own voice, descriptive writing and literary devices, poetic forms, overcoming writer's block and the art of telling tales.

Creative Writing II

(Course Code: 402332)

This class is a continuation of Creative Writing I. Creative Writing II is a process oriented, interactive course. It includes a variety of writing activities with an emphasis on poetry, the short story and drama. The process of drafts, critiques, and revisions will culminate in the publication of a literary collection of student work.

Critical Reading

(Course Code: 414332)

This course is designed to dramatically accelerate reading growth by strengthening comprehension outcomes. Students will evaluate literary and informational texts and multicultural literature of diverse formats. Students will engage in learning events tied to a variety of literary and informational texts with increasing complexity.

Teen Classics

(Course Code: 413632)

Students will read a wide range of literature from many periods in many genres to build an understanding of the many dimensions of human experience.

Bible History in Literature

(Course Code: 413732)

This course is to equip students with a fundamental understanding of the important literary forms contained in the Bible as well as Biblical figures and symbols often referred to in literature, art, and music. Provide a fundamental understanding of the influence of the Bible on history, law, literature, and culture. Provide a greater knowledge of Middle-Eastern history, geography, religion, and politics and to inform the students of the importance of the Bible in world and national history, without imposing the doctrine of any religious sect.

SOCIAL STUDIES

World Studies

(Course Code: 701032)

The ninth grade social studies engages students in the study of the 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 1900. 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. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

U.S. Studies

(Course Code: 700932)

The tenth grade program of study 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 Pre-Columbian civilizations to its transformation as a dominant political and economic influence in the world. Special emphasis is placed on how the challenges of settling expansive and diverse physical environments were met by a culturally diverse population. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

MU 20th Century History

(Course Code: 70113X)

This is a survey of world developments and trends from the 19th century to the present and their implications for the future. Seniors who have successfully completed 20/21st Century History as a junior may take this class.

Contemporary Studies

(Course Code: 701132)

In the eleventh grade social studies students examine the historical evolution and global interaction of states, nations and nation-states from geographic, political and economic perspectives from 1900 through present day. Students engage in critical thinking and problem-solving skills, using maps, spreadsheets, charts, graphs, primary source documents and text and other data from a variety of credible sources to synthesize historical information, predict events and anticipate outcomes. Students recognize the economic interdependency of the United States with other countries of the world. Students examine the factors that influence changing political relationships 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 on world events will be emphasized. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

Civics for Next Generation

(Course Code: 703132)

Responsible participatory citizenship, an understanding of the workings of our government, sound financial literacy and global awareness are essential to the preservation and improvement of American Constitutional Democracy. Civics for the 21st Century is the capstone social studies course combining civics, economics and geography to prepare students as 21st Century citizens. Students engage 21st century tools to expand upon their critical thinking and problem-solving skills allowing them to become financially literate, to develop civic efficacy, and to acquire the geographic knowledge necessary to understand the physical and human systems of the world. Students become informed decision makers as they work collaboratively and develop a correct awareness of their place in a global society. Students engage in communication skills to acquire and convey their knowledge appropriately.

Geography

(Course Code: 703332)

The power and beauty of geography allows all students to see, understand, and appreciate the web of relationships between people, places, and environments. Geography provides knowledge of Earth's physical and human systems and of the interdependency of living things and physical environments. This geography course is based on the six essential elements of geography and stresses the contemporary world and the role of the U.S. in the global community. Students will use geographic perspectives and technology to interpret culture, environment and the connection between them. Students will use the geographic skills of asking geographic questions, acquiring geographic information, organizing geographic information, analyzing geographic information and answering geographic questions.

Economics

(Course Code: 703232)

Understanding economics is essential for all students to enable them to reason logically about key economic issues that affect their lives as workers, consumers, and citizens. A better understanding of economics enables students to understand the forces that affect them every day and helps them identify and evaluate the consequences of personal decisions. As resources become scarce, as the economic environment changes, and as the economic impact of decisions becomes more immediate, students must emphasize the need to make sense of the array of economic concepts, facts, events, observations and issues in everyday life and the ability to make effective decisions about economic issues.

World War II & the Holocaust

(Course Code: 724432)

The purpose of this class is for students to dissect all facets of World War II and the Holocaust. Students will analyze causes, events, and effects of World War II and the Holocaust. Students will study from a global perspective, taking and defending multiple points of view.

Note: Honors Social Studies courses are also available, interested students should discuss prerequisites with their counselor. Dual Credit Social Studies courses are also available, (see college requirements at the end of the description book). AP History may be available in the county or through virtual school, (check with your counselor re: availability), but note, students who choose to enroll are strongly encouraged to take the AP test.

Psychology

(Course Code: 732132)

Psychology is the study of human behavior: Why do people do what they do? The course covers the cycle of life, emotions, motivation, sleep, dreams, personality, and abnormal behavior. The focus is on understanding ourselves and dealing with everyday situations in our lives.

Sociology

(Course Code: 734132)

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.

Advanced Placement Psychology

(Course Code: 704732)

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

MU Psychology

(Course Code: 73213X)

General Psychology. Principles and methods in the scientific study of behavior will be studied.

MU Political Science

(Course Code: 71393X)

This course approaches the study of politics from a theoretical perspective, including an examination of the role of government and the nature of political behavior, political power and political action.

AP U.S. Government and Politics

(Course Code: 704432)

AP U.S. Government is a college-level introductory course designed for 12th grade students to learn about the United States Government and Politics as well as prepare for the AP Government exam. The course will focus on the Constitution, citizenship, political parties, political beliefs, public policy, the branches of government, the mass media, interest groups, civil rights, and a variety of current events and other topics. The course will be taught in a variety of methods including lecture and note-taking, discussion and debate, individual investigation, long-term assignments, group and individual projects, as well as using technology in and out of the classroom.

Advanced Placement World History

(Course Code: 704832)

This course begins with Foundations, focusing on setting the historical and geographical context and the world historical patterns that form the basis for future developments. For each part of the course there is an outline of major developments that students are expected to know and be able to use in making comparisons across the cultures. These developments and comparisons relate to the five overarching themes. For each period after Foundations, periodization is the first task: to explain difference from the period just covered and from periods to come. For all periods, examples of major interpretative issues, alternative historical framework, and historical debates are included.

Advanced Placement European History

(Course Code: 704532)

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

Advanced Placement United States History

(Course Code: 704632)

The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials – their relevance to a given interpretive problem, reliability, and importance – and to weigh the evidence and interpretations presented in historical scholarship. An AP U.S. History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.

MATHEMATICS

NxG Algebra I

(Course Code: 306132)

Algebra I objectives provide the gateway to all higher mathematics courses. An emphasis on conceptual development and multiple representations will be used to draw generalizations and to serve as a tool for solving real-world problems. Various strategies will be used to bridge the gap from the concrete to the abstract. Available technology such as calculators, computers, and interactive utilities are to be used as tools to enhance learning.

NxG Geometry

(Course Code: 306232)

Geometry objectives are designed for students who have completed the objectives for Algebra I. Study includes experiences and activities that foster in students a feeling for the value of geometry in their lives. Emphasis is placed on development of conjectures by inductive processes using manipulatives and computer software. Cooperative learning groups are particularly effective in allowing students to become proficient in analyzing conjectures and in formulating both formal and informal proofs. Emphasis should be placed on connections to other branches of mathematics and other disciplines, and on workplace applications.

NxG Algebra II

(Course Code: 306332)

Algebra II objectives emphasize the use of investigation to more advanced functions, using them to solve real-world problems. Focus is on multiple representations to develop conjectures, testing and justifying validity. Calculators, computers, and interactive utilities are an integral part of instruction. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

Conceptual Mathematics

(Course Code: 304432)

Conceptual Mathematics objectives include major topics from algebra and geometry and extend these ideas to practical usage. Basic ideas of probability and statistics and the mathematics of finance are included. These big ideas are to be presented in the context of their historical development. Full integration of calculators, computers, and interactive utilities are essential for mastery.

Transition Mathematics for Seniors

(Course Code: 305232)

Transitional Math for Seniors prepares students for their entry-level credit-bearing liberal studies mathematics courses 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.

Trigonometry

(Course Code: 304832)

Trigonometry objectives emphasize making connections between right triangle trigonometry and circular functions. Calculators, computers, and interactive utilities will be used to enhance student learning. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools.

Probability and Statistics

(Course Code: 304732)

Probability and Statistics is one of the most important branches of the mathematical sciences. Knowledge of these topics is critical to decision-making and to the analysis of data. Using concepts of probability and statistics, individuals are able to predict the likelihood of an event occurring, organize and evaluate data, and identify the significance of statements. Connections between content and applications to the real-world will be emphasized. Graphing utilities such as calculators and computers will be used to enhance student learning and to aid in the solution of practical problems.

Pre-Calculus

(Course Code: 304632)

Pre-Calculus objectives extend students' knowledge of functions and equations (e.g., higher-order functions, exponential, and logarithmic) as well as provide preparation for a calculus. Available technology will be used by students and teachers to enhance learning. Graphing utilities are powerful tools for solving and verifying equations and inequalities. They also aid in investigating functions, and their inverses. **Dual credit college algebra is also offered in the county**

Calculus

(Course Code: 314432)

Calculus is designed for students who have mastered Trigonometry. It is recommended to be taken before AP Calculus.

Advanced Placement Calculus AB

(Course Code: 303132)

Calculus AB is an Advanced Placement curriculum in elementary functions. It is recommended to be taken after Calculus. The major topics include differential and integral calculus.

Algebra Support

(Course Code: 302432)

This is designed to bridge the gap from concrete to abstract for the student who is not ready to take Algebra I. An emphasis on conceptual development and multiple representations will be used to draw generalizations and to serve as a tool for solving real-world problems.

Algebra III (MU Math 127)

(Course Code: 30513X)

Solve equations and inequalities, solve systems of linear equation, study of functions (including exponential and logarithmic functions), matrices, basic probability and statistics.

SCIENCE

Earth and Space Science - Grade 9

(Course Code: 620132)

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.

Biology

(Course Code: 602132)

This is an advanced level course designed for students who have completed Physical Science and 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 interested in health and scientific related careers will build and expand their 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. **Note: Honors Biology is also available. Interested students should discuss prerequisites with their counselors.**

Conceptual Biology

(Course Code: 602232)

This is an introductory course designed for students who have completed Physical Science and who are interested in the field of technical biology with the scientific knowledge and opportunities to develop the inquiry, problem solving and decision making abilities necessary for their future vocation. Conceptual Biology is an alternative to Biology and is designed to prepare students for entry-level careers, using skills for the 21st Century. This course will provide an in-depth study in the chemical nature of life, cellular functions, microbiology, ecology, biotechnology, zoology and botany with application emphasis. It builds on the fundamental concepts developed in the science program in a rigorous and integrated manner. 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. Safety instruction is integrated into all activities. **Note: This is not considered a rigorous lab-based science course for a Bachelor's Degree program.**

Physical Science

(Course Code: 601132)

The Physical Science objectives continue the development of foundational knowledge in biology, chemistry, physics, earth/environmental science and astronomy. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy and the use of 21st Century Skills across these major fields of science. Subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes, and models. Students will engage in active inquiries, investigations and hands-on activities for a minimum of 50 percent of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities. Building on the knowledge and skills acquired in Eighth Grade Science, students in Ninth Grade Physical Science will expand and deepen their understanding of major concepts such as energy interactions, genetic probabilities, chemical changes and mineral composition of local rock layers. **Note: Honors Physical Science is also available. Interested students should discuss prerequisites with their counselors.**

Advanced Placement Biology / Lab

(Course Code: 612132/612232)

The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. The course involves an in-depth study of three overarching themes which are: Molecules and Cells, Heredity and Evolution, and Organisms and Populations. Throughout the semester, we consider each of these in the broader context of eight major themes which are specified by the College Board's AP Biology course description.

Chemistry

(Course Code: 603132)

Chemistry is the advanced study of matter, its composition and its changes. This course is designed to build upon and extend the Chemistry concepts, skills and knowledge from the science program using skills for the 21st century. This course is designed to prepare a student for college chemistry, requiring a strong mathematical base. The relationship between chemistry concepts and mathematics will be emphasized. 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.

Chemistry II

(Course Code: 603332)

Conceptual Chemistry

(Course Code: 603232)

An introductory level course designed for students in the skilled pathway who have completed Ninth Grade Physical Science and who desire an alternative to a traditional college preparatory course emphasizes real life applications of chemical principles. Mathematical-based problem solving is de-emphasized. Conceptual Chemistry is the study of matter, its composition and its changes. Emphasis is placed on the important role chemistry plays in a student's personal life, career opportunities, environment and society while developing 21st century skills. 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. **Note: This is not considered a rigorous lab-based science course for a Bachelor's Degree program.**

Advanced Placement Chemistry/Lab

(Course Code: 632132/632232)

This course involves an in-depth study of fundamental forces in the field of chemistry. This course will give students the opportunity to explore the field of chemistry both by rigorous study and laboratory applications. The topics covered include a review of topics from Advanced Chemistry, Thermochemistry, Kinetics, Equilibrium, Electrochemistry, Intermolecular Forces, Solutions, Nuclear Chemistry, Organic Chemistry, and AP Test Preparation. The prerequisite for this course is Chemistry.

Human Anatomy and Physiology and Lab

(Course Code: 610332/610432)

This advanced course is 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.

Physics

(Course Code: 604132)

A course designed for students who have completed Physical Science and desire a broader, in-depth study of the content found in the science field of physics. As a college preparatory course, Physics is a laboratory driven, advanced study of nature's universal laws with emphasis on process skills using 21st century skills. This course is designed to build upon and extend the Physics concepts, skills, and knowledge from the science program. The course emphasizes a mathematical approach to the areas of kinematics, dynamics, thermodynamics, light and optics, electricity and magnetism and modern physics. 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.

Conceptual Physics

(Course Code: 604232)

Conceptual Physics is an introductory course designed for students who have completed Physical Science and desire an in-depth study in physics to prepare them for technical careers. This course is an alternative to the traditional mathematical approach to physics. This approach covers the physics principles in a traditional sequence with an emphasis on conceptual understanding. While mathematics is de-emphasized, laboratory work will require traditional physics measurements to be made. Emphasis will be on the concepts that underlie the natural laws of the universe. 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. **Note: This is not considered lab-based science course for a Bachelor's Degree program.**

Advanced Placement Physics 1

(Course Code: 632632)

Skilled Physics students may choose to take AP Physics. AP Physics is a comprehensive study of college-level, algebra-based Physics. Beyond the skills learned in core Physics, AP Physics students learn to solve harder problems and handle more involved concepts. Curriculum includes advanced kinematics and rotational forces, thermodynamics, electricity and magnetism, and nuclear and atomic physics. AP Physics requires an intensely logical mind and considerable success in Physics.

Advanced Placement Environmental Science

(Course Code: 622132)

It is recommended by the College Board that this class be open to students who have completed Biology, Earth Science, and Algebra. Students must be prepared to work outdoors for many of the labs. . Emphasis is placed on developing an understanding of the interrelationship of the natural world and the environmental problems it faces.

Environmental Science

(Course Code: 631232)

Environmental Science is an elective, advanced level lab course which builds on foundational knowledge of the chemical, physical, biological, geological processes and focuses on the natural world and man's impact on it. Through an inquiry-based program of study, students will investigate the use of renewable and non-renewable resources, oil spills, mining, industry, agriculture, and urban sprawl. This class will be heavily focused on project based learning activities, and laboratory experiences.

Forensic Science

(Course Code: 606232)

This course is a combination of Biology, Chemistry, Earth Science, Mathematics Physics and Psychology. Forensic Science investigates the real mysteries of science. Topics of discussion will include the history of fingerprints, DNA profiling, hair, and toxicology.

Astronomy

(Course Code: 626232)

This course is a general introduction to astronomy. Topics (chosen by instructor) may include historical astronomy, planets, comets and asteroids, the sun, stars and galaxies.

Introduction to Organic Chemistry

(Course Code: 772032)

This course will introduce students to the basic vocabulary and concepts of organic chemistry through lecture, research and lab activities. This course will expand beyond the concepts of general high school chemistry to prepare student for collegiate level organic chemistry.

FOREIGN LANGUAGE

Spanish I

(Course Code: 566132)

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

(Course Code: 566232)

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

(Course Code: 566332)

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 time, some communicative lapses occur.

Spanish IV

(Course Code: 566432)

The expansion of communication skills remains the focus of Modern Foreign Languages 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 discussions 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 thing, 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.

Note: Dual credit in Spanish is available for students who meet the requirements, check with your counselor.

THE ARTS

Art I

(Course Code: 321132)

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. 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

(Course Code: 321232)

Students in Art II extend artistic skills, critical skills, and concept development through well-defined experiences in creating, reflecting, and discussing artworks. 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. All these concepts and processes reflect 21st century skills and content.

Art III

(Course Code: 321332)

Art III builds on previous content standards with a more in-depth approach. 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

(Course Code: 321432)

General Art Level IV Visual Art In Art IV, students develop and clarify their philosophy of art and art making through in-depth explorations with media, techniques and processes. 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.

Studio Art I

(Course Code: 324132)

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 topics 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.

AP Studio Art Design

(Course Code: 322232)

This honors level course is designed for a student who wants to create a portfolio for admission to a college art program. A portfolio will also be submitted to the College Board as a part of the AP assessment program.

Art History

(Course Code: 323232)

The students identify, discuss, and compare cultural and multi-cultural influences on the arts, including social, political, economic, functional and aesthetic considerations. They develop a variety of critical analyses. They examine different philosophies and viewpoints. Students' experiences with art media within its historical context will connect selected artwork to the artist's process. Products and/or presentations relate cognitive learning to artistic practices. All of these activities demonstrate 21st Century Content, Skills, and Literacy. Knowledge of related careers in the fields of art history and aesthetics are covered as well as the application of technology to assist learning.

Art Appreciation

(Course Code: 323132)

The students identify, discuss, and compare cultural and multi-cultural influences on the arts, including social, political, economic, functional and aesthetic considerations. They develop a variety of critical analyses. They examine different philosophies and viewpoints. Students' experiences with art media within its historical context will connect selected artwork to the artist's process. Products and/or presentations relate cognitive learning to artistic practices. All of these activities demonstrate 21st Century Content, Skills, and Literacy. Knowledge of related careers in the fields of art history and aesthetics are covered as well as the application of technology to assist learning.

Theatre I

(Course Code: 380132)

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.

Theatre II

(Course Code: 380232)

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

(Course Code: 380332)

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

(Course Code: 380432)

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.

Chorus I - Beginning

(Course Code: 362132)

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 refine their singing skills; they study various composers, choral music and styles. They learn to sing using expression developing further technique. 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 II - Intermediate

(Course Code: 362232)

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 refine their singing skills; they study various composers, choral music and styles. They learn to sing using expression developing further technique. 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 III - Advanced

(Course Code: 362332)

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 refine their singing skills; they study various composers, choral music and styles. They learn to sing using expression developing further technique. 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

(Course Code: 362432)

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 refine their singing skills, they study various composers, choral music and styles. They learn to sing using expression developing further technique. 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.

Vocal Ensemble (Show Choir)**(Course Code: 376632)**

An auditioned honors singing group in which members take leadership roles. The group performs at many community events and attends show choir festivals. Ensemble and solo singing will be studied along with proper vocal techniques and theory. Repertoire may include jazz, show, concert and other music literature. After school rehearsals and performances will be required. All must also take either chorus or band.

Guitar I - IV**(Course Code: 372632-372932)**

This is a class for beginning guitar students only. Students may use school- owned guitars in class. Reading music, basic chords- as well as strum and pick patterns- are taught.

Band General**(Course Code: 371632)**

This is for students that have never played a musical instrument before.

Band I - IV**(Course Code: 361132-361432)**

The 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.

Piano I**(Course Code: 368132)**

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**(Course Code: 368232)**

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 III**(Course Code: 368332)**

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.

Rock Music History

The student will receive an introduction of the history of American Popular Music. They will develop skills in reading and understanding music notation, and explore the expressions and organization of musical ideas in relation to the evolution of American History. Students will explore the basic playing skills of instruments typically used in American Popular Music (e.g. guitar, piano, drums). Students will learn the historical and cultural background of American Popular Music and appropriate repertoire.

Music Appreciation/History/Humanities**(Course Code: 367132)**

The student will develop skills in reading and understanding music notation and explore the expressions and organization of musical ideas. Students study music as it relates to human experiences. All objectives for each level must be taught; therefore, the difference between the three levels of performance depends upon the number and accuracy of objectives accomplished.

Music Theory**(Course Code: 375632)**

This course in Music Theory, Composition, and Arranging is designed to challenge the most advanced music students. Emphasis is on the study of scales, key signatures, chords and chord structure, composition, and improvisation. Students will learn to use composition as a tool for composing, transposing, and transcribing music. All objectives for each level must be taught; therefore, the differences among the three levels of performance depend upon the number and accuracy of objectives accomplished.

Dance I**(Course Code: 340132)**

This course is an introduction to dance. It is an elective credit that will meet the Fine Arts elective credit. The main objective is to provide students with knowledge of the history of dance and how dance has changed through the ages. Male/ female roles will be taken to learn basic intermediate steps. Students will take part in the teaching techniques of the different dances. **This is not an elective credit for Physical Education.**

Photography (PPHS 0.5 credits)**(Course Code: 334332)**

Computer skills to save various file types, creating and managing folders. Creating and managing accounts on Edmodo and Google Drive, use google maps, snipping tool and google images to retrieve images from the web. Learn digital editing skills.

Drawing I (PPHS)**(Course Code: 333132)**

This course focuses on life, picture, masterworks, and imagination. Learning with an emphasis to develop higher-level thinking, art-related technology skills, art history, and aesthetics.

Drawing II (PPHS)**(Course Code: 333232)**

Students will assemble and create drawings by manipulating art media and by organizing images with the elements and principles.

Drawing III (PPHS)**(Course Code: 771132)**

Communicate thoughts and feelings and ideas through their original work. Create original art that reflects daily life. Create original works by observation such as from still life, live model or on location outside. Produce self-selected utilizing all skills and elements learned in Drawing I and Drawing II and expound on skills.

Drawing IV (PPHS)**(Course Code: 771232)**

Study of human hand, draw from life. Set up original still life. Apply perspective and shading skills create original picture of life on another planet from your mind. (imagination) Draw an original picture of friends as a group scene.

Ceramics I (PPHS)**(Course Code: 330732)**

Students will understand, select, and apply media techniques and processes, understand and apply elements and organizational principles of art. Will consider, select, and apply a range of subject matter, symbols, and ideas. Students will understand the visual arts in relation to history and cultures. Students will reflect upon, describe, analyze, interpret, and evaluate their own and other's work. Students will make connections between the visual arts, other disciplines and daily life.

Ceramics II (PPHS)**(Course Code: 330832)**

Students will understand, select, and apply media techniques and processes, understand and apply elements and organizational principles of art. Will consider, select, and apply a range of subject matter, symbols, and ideas. Students will understand the visual arts in relation to history and cultures. Students will reflect upon, describe, analyze, interpret, and evaluate their own and other's work. Students will make connections between the visual arts, other disciplines and daily life.

Painting I (PPHS)**(Course Code: 336732)**

Students will assemble and create paintings by manipulating art media and by organizing images with the elements and principles.

Painting II (PPHS)**(Course Code: 771032)**

The student applies painting media, techniques, and processes with sufficient skills, confidence, and sensitivity to carry out personal intentions in artworks. Through experience in a range of painting processes, use of a variety of materials, and development of a repertoire of techniques, the student understands the relationship of process, material, and technique to communication of ideas.

Painting III (PPHS)**(Course Code: 336932)**

Communicate thoughts and feelings and ideas through their original work. Create original art that reflects daily life. Create original works by observation such as from still life, live model or on location outside. Produce self-selected drawings utilizing all skills and elements learned in Painting I and Painting II – expound on skills. Introduction of new media and creating mixed media projects.

Painting IV (PPHS)

(Course Code: 337032)

Expound on skills previously learned in Painting I, II, & III. Set up original still life. Set up original still life. Apply perspective and shading skills create original picture of life on another planet from your mind. (imagination) Paint an original picture of friends as a group scene. Participate in Mural Painting or extremely large projects.

Film Studies (PPHS)

(Course Code: 381932)

The student will access, analyze, manage, integrate, evaluate, and create information in a variety of forms using appropriate technology skills and communicate that information in an appropriate oral, written, or multimedia format.

HEALTH AND PHYSICAL EDUCATION

Health Grades 9-12

(Course Code: 690932)

This program of study builds on the foundation established in the K-8 health education curriculum and prepares students to become wise health care consumers and responsible, productive citizens. The relationships among personal, community and world health and economic, cultural, sociological, biological, and environmental factors are examined in interdisciplinary discussions, debates, and class projects. Students examine personal health choices and the connection to the world of work and assumption of adult roles. In-depth analysis of current health issues and concepts coupled with school-wide opportunities that promote and reinforce the importance of good health and positive choices need to be coordinated to have the greatest impact on adolescent behavior. Instruction continues to focus on prevention of all risk behaviors, however, instruction must also emphasize limiting the negative consequences of high-risk behavior and promote values and norms that are age-appropriate and realistic. Students should have a personal perception of risk, the ability to recognize and resist social pressures and the skills to build positive social relationships. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology and objectives. **Note: In accordance with West Virginia Code §18-2-9, the West Virginia Department of Education shall provide a standardized health education assessment to be administered in high school health education classes in order to measure student health knowledge and program effectiveness.**

Physical Education Grades 9-12

(Course Code: 660932)

Physical education can be a vehicle through which high school students transition from adolescence to adulthood. High school physical education programs focus on fitness, offer diverse movement patterns, development of motor skills and lifetime activities. Students will be exposed to a wide variety of activities both competitive that bring them enjoyment and challenges thus enabling them to maintain an active lifestyle for a lifetime. The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology and objectives. **Note: In accordance with WV Code 18-2-7-a the fitnessgram shall be administered to all students.**

Lifetime Fitness

(Course Code: 673332)

Movement skills are explored through a broad spectrum of sequentially planned activities in which students learn to move efficiently, creatively, and effectively, Instruction in these skills is further enhanced by a thorough knowledge and understanding of the underlying mechanics, principles, and concepts of efficient skill utilization and applications of information literacy skills, thinking skills and positive attitudes to performance. Ultimately, movement skill development should provide a foundation for and desire to develop and maintain a healthful, physically active lifestyle. Activities which will enhance and maintain physical fitness throughout the student's lifetime will be emphasized. **Note: this is an elective; it does not meet the state P.E. requirements.**

OTHER OFFERINGS & OPPORTUNITIES

Library Science

(Course Code: 591132)

This course assists with the orientation of students and faculty to the library and gives instruction in library skills. It also assists teachers and students in location materials. Students perform tasks as needed, shelve books and magazines, learn proper use of library equipment. Students will use electronic database, learn new programs and efficient use of the Internet, assist in inventory and other duties assigned. Permission from the librarian is required for registration.

Test Strategies

(Course Code: 766132)

Test Taking Strategies is a course designed to assist students in improving their fundamental skills in reading comprehension, vocabulary, written work, mathematics, problem solving, and critical thinking activities to enable the students to perform better on tests. Additional skills that will be encouraged for each student to continue to develop include positive social interaction with peers, self-confidence in abilities, and fine motor skills. Students will be given individual assistance to help in academic success.

Life Connections

(Course Code: 090132)

Life Connections will enable students to develop skills for assuming their role in society as productive, successful individuals. Through integrated, project-based learning founded on real-life situations and issues, by utilizing basic skills and higher order thinking skills, the student will learn problem management techniques, resource management, communication skills, and skills in relationships. The course helps students develop competence in setting and achieving personal goals, in examining career options, in handling their current and future jobs and careers, in meeting basic needs, and in managing finances.

Driver Education

(Course Code: 681132)

The program of study includes cognitive development relating to traffic laws and ordinances traffic signs, signals and markers, natural laws fuel conservation and vehicle restraint systems. Also included are the physical psychological and legal aspects effects and consequences of the use of alcohol and drugs as related to the driving of motorized vehicles. Instruction is provided to develop the perceptual and psychomotor skills required for basic control of the vehicle, lane changing, passing, following, entering and exiting from traffic, driving in cities/towns on rural and urban roads and freeways, responding to emergencies various road and weather conditions defensive driving techniques and interaction with other highway users including motorcycles, ATV's and trucks. The program emphasizes strategies to develop behavior patterns known as the SIPDE Concept, (search, identify, predict, decide and execute). The West Virginia Standards for 21st Century Learning include the following components: 21st Century Content Standards and Objectives and 21st Century Learning Skills and Technology Tools. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology and objectives. Note; **seniors, (12th grade), then (juniors, (11th grade) will be given priority in scheduling for this.**

Dual Credit

The following dual credit classes will be available in the county: English 101, English 201, Psychology, History 103, Math 127, Math 102, Physics 101, Chemistry 203, Biology (for non science majors), Music Appreciation, Medical Terminology, Spanish 101, Spanish 102 .

Virtual Schools

Many opportunities are available to students through the Virtual School Program which is affiliated with WVDE. It is very important for students who are interested in these courses to work with their counselors to enroll prior to September of each year (to avoid fees).

CAREER INFORMATION

Links

(Course Code: 767632)

Work Based Learning

(Course Code: 766532)

Work placement will only be allowed in the student's selected career concentration and students must apply and be accepted to this class/program.

GENERAL INFORMATION

Elective Classes

Elective classes and dual credit classes will be scheduled based on student interest/enrollment. Some classes will not be offered in all locations. The county will offer the opportunity for a student who is interested in a class that is not offered in his/her home high school, (due to lack of interest/enrollment), to take the class or classes in another county school or through the virtual school program. Non occupational Business and Family & Consumer Science s are available in each of the home high schools. Occupational Career and Technical Education programs are only available at Mason County Career Center, (with the exception of the Agricultural Science program at Hannan).

COLLEGE ENROLLMENT IN HIGH SCHOOL

EDGE Credit Opportunities

Earn a Degree – Graduate Early. This program is free to all students. It offers students enrolled in “EDGE Classes” an opportunity to receive a Community and Technical College Credit with no cost to them. The EDGE credit is awarded when students pass the End of Course Test in many career /technical and high schools. The number of EDGE s is expanding each year.

College On Line Program

This is not a dual credit program. Interested students are encouraged to avail themselves of this opportunity but note; this program is not a part of the high school transcript and Mason County Schools does not provide textbooks or tuition assistance

Marshall University/MountWest Community and Technical/Mason County Dual Credit Courses

The Dual Credit Program provides an opportunity for qualified high school students to gain valuable experience in a college before they leave high school. Marshall University and MountWest Community and Technical College, in partnership with our local public and private high schools, offers the student college classes taught by qualified teachers who have successfully completed the academic approval process. In order to fulfill the requirements of dual credit, students will follow the high school calendar for high school credit and the Marshall calendar for Marshall University and the Mountwest calendar for Mountwest credit. Students will follow the Mason County Board of Education attendance policy to receive high school credit. To receive dual credit the student must successfully master the required objectives for the college and the WV Board of Education Content Standards for the high school. The final recorded grades for dual credit classes may be different because the Marshall portion of the class is completed prior to the end of the High School term.

MARSHALL UNIVERSITY REQUIREMENTS

Juniors & Seniors - students must: have a B (3.00) or better overall grade point average, have the recommendation of the high school principal or counselor, meet all requirements and prerequisites, submit a Marshall University high school application & application fee to the school counselor, must submit a valid immunization record including measles, mumps, and rubella vaccinations, for Math and/or English s, a student must have a pre-existing ACT / SAT score in the subject area: (English courses an ACT of 18 or SAT of 450 verbal); (Math an ACT of 19 or SAT of 460 in math), also note that some math s may require a higher ACT / SAT score. All applicable tuition charges will be paid to the Mason County Board of Education.

Sophomores & Freshmen – students must:: submit a valid immunization record including measles, mumps, and rubella vaccinations, have an ACT, SAT or other standardized test score at least at the 85th percentile, a WESTEST scores with an across-the-board “Above Mastery” or approved Talented and Gifted participation, or strong evidence of outstanding accomplishment in the discipline in which the student wants to enroll, have a B (3.00) grade point average in the discipline in which the student wants to enroll and a 3.00 overall grade point average, have recommendations from two teachers who are familiar with the student’s academic performance or by experts in the student’s talent area. Students are to submit a Marshall University high school application & application fee to school counselor. All applicable tuition charges will be paid to the Mason County Board of Education. Students meeting university requirements may choose from university or community and technical college courses.

MOUNTWEST COMMUNITY AND TECHNICAL COLLEGE (MCTC) REQUIREMENTS

Students must: have completed an application and pay the application fee, submit a high school transcript reflecting a minimum GPA of 2.50 or higher, submit one letter of recommendation from a high school counselor or principal. MountWest Community and Technical College has an attendance requirement. Note; this category allows the student to participate in Community and Technical College classes only (no baccalaureate level classes, i.e. English 101, Math 100 levels, etc.)

OVERVIEW OF CAREER CLUSTERS

West Virginia graduation requirements specify that ALL high school students declare a focus (major) by the end of their sophomore year. After declaring a major, students are expected to take at least six specific courses that will prepare them to enter some type of post-secondary education after high school. There are over 60 majors organized by six occupational clusters.

Before entering high school, 8th graders are asked to start thinking about their general academic interests. As part of the middle level guidance program, all students must complete a Two-Year Plan that maps out the first two years of high school. Within this plan, students are to identify the Cluster that matches their academic interests and talents at that time. The eleven clusters are as follows:

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Arts, A/V Technology and Communications
- Business Management and Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Manufacturing
- Marketing
- Transportation, Distribution and Logistics

Mason County Schools Career and Technical Education Program Areas

Agricultural, Food and Natural Resources Cluster

AG0110 Power, Structural and Technical Systems Concentration

Course One 0101 Introduction to Agriculture, Food and Natural Resources

Course Two 0112 Fundamentals of Agriculture Mechanics

Course Three (Specialization Elective: Choose One: 0113 Agriculture Structures OR 0114 Agriculture Equipment and Repair)

Course Four 0134 Agricultural Experience Program

Concentration Description:

The Power, Structural and Technical Systems concentration focuses on entrepreneurial and technical skills and careers in the agricultural mechanics industry. Specializations for this concentration allow students to pursue their interests in either agricultural structures or agriculture repair and maintenance.

Course Descriptions:

0101 Introduction to Agriculture, Food, and Natural Resources

This is a core course for the Agriculture, Food and Natural Resources Career Cluster that builds a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers. 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.

0112 Fundamentals of Agriculture Mechanics

This course introduces the knowledge and skills for applying the physical science principles and principles of operation and maintenance to mechanical equipment, welding and fabrication, structures, plumbing, electrical wiring, power utilization, 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.

0113 Agriculture Structures

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.

0114 Agriculture Equipment and Repair

This course builds on the principles of the previous course and provides more in-depth knowledge and skills as they relate to energy sources, lubricants, service and maintenance of machinery and equipment, and equipment operation. Students will apply principles of service and repair by troubleshooting problems and evaluating engine performance, follow guidelines to service and repair power transmission systems, hydraulic systems, and entrepreneurship. Tools used with these procedures will allow students to demonstrate proper skills and 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, FFA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

0134 Agricultural Experience Program

The Supervised Agricultural Experience program is a hands-on, student planned way for them to apply skills learned in the classroom to real world agricultural experiences. With help from their agricultural teachers, students develop an SAE project based on one or more SAE categories: **Entrepreneurship, Placement, Research and Experimentation and Exploratory.**

Extra Elective:

2002 Agriculture Small Engine Repair

This course is an elective course in the Agriculture, Food and Natural Resources cluster. The skill sets focused in this course to develop a students' knowledge and abilities in the theory of operation, maintenance, troubleshooting and repair of small gasoline engines. Safety instruction is integrated into relevant 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.

AG0120 Agribusiness Systems Concentration

Course One 0101 Introduction to Agriculture, Food and Natural Resources

Course Two 0102 The Science of Agriculture

Course Three (Specialization Elective: Choose One: 0140 Animal Production Management OR 0112 Fundamentals of Agriculture Mechanics OR 0201 Horticulture)

Course Four 0134 Agricultural Experience Program

Concentration Description:

The Agribusiness Systems concentration focuses on entrepreneurial and technical skills and careers in the broad spectrum of Agriculture, Food, and Natural Resources. This concentration offers the most flexibility of all agriculture concentrations for students to select a specialization from many areas: Forestry, Horticulture, Advanced Agriculture Principles, Animal Science, Agriculture Mechanics, Animal Processing, Natural Resources, Biotechnology, Entrepreneurship and Food Science.

Course Descriptions:**0101 Introduction to Agriculture, Food, and Natural Resources**

This is a core course for the Agriculture, Food and Natural Resources Career Cluster that builds a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers. Students utilize problemsolving 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.

0102 The Science of Agriculture

This course focuses on the basic scientific principles and processes related to the production of plants and animals for the food and fiber systems. Topics of instruction include basic understanding of the livestock/poultry industry and its various components, career opportunities, soil science, crop science/agronomy, weed science, basic agricultural mechanics and related industry careers, environmental stewardship, entrepreneurship, and leadership/personal development. 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.

0212 Horticulture

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.

0140 Animal Production and Management

This course is designed to be a core course in the Animal Systems concentration. The course will cover topics on animal restraint, animal management techniques, animal health and welfare, balancing rations, pedigree analysis, 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.

0112 Fundamentals of Agriculture Mechanics

This course introduces the knowledge and skills for applying the physical science principles and principles of operation and maintenance to mechanical equipment, welding and fabrication, structures, plumbing, electrical wiring, power utilization, 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.

0134 Agricultural Experience Program

The Supervised Agricultural Experience program is a hands-on, student planned way for them to apply skills learned in the classroom to real world agricultural experiences. With help from their agricultural teachers, students develop an SAE project based on one or more SAE categories: **Entrepreneurship, Placement, Research and Experimentation and Exploratory.**

AG0210 Plant Systems Concentration

Course One	0101	Introduction to Agriculture, Food and Natural Resources
Course Two	0212	Horticulture
Course Three	0214	Greenhouse Production and Management)
Course Four	0134	Agricultural Experience Program

Concentration Description:

The Plant Systems concentration focuses on entrepreneurial and technical skills and careers in the areas of plant science, greenhouse management and production, fruit and vegetable production, floriculture and turf and landscape systems. The concentration offers four unique specializations. Specializations are offered in Fruit and Vegetable Production, Greenhouse Production and Management, Floriculture and Turf and Landscape Systems.

Course Descriptions:

0101 Introduction to Agriculture, Food and Natural Resources

This is a core course for the Agriculture, Food and Natural Resources Career Cluster that builds a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food, and natural resources careers. 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.

0212 Horticulture

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.

0214 Greenhouse Production and Management

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.

0134 Agricultural Experience Program

The Supervised Agricultural Experience program is a hands-on, student planned way for them to apply skills learned in the classroom to real world agricultural experiences. With help from their agricultural teachers, students develop an SAE project based on one or more SAE categories: **Entrepreneurship, Placement, Research and Experimentation and Exploratory.**

AG0220 Animal Systems Pathway

Course One 0101 Introduction to Agriculture, Food and Natural Resources

Course Two 0140 Animal Production and Management

Course Three 0230 Livestock Production

Course Four 0134 Agricultural Experience Program

Concentration Description:

The Animal Systems concentration focuses on entrepreneurial and technical skills and careers in the areas of animal production and management, animal science, livestock production, aquaculture, equine science and companion animal care. The concentration offers four unique specializations. Specializations are offered in Livestock Production, Companion Animal Care, Aquaculture and Equine Science.

Course Descriptions:

0101 Introduction to Agriculture, Food and Natural Resources

This is a core course for the Agriculture, Food and Natural Resources Career Cluster that builds a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food, and natural resources careers. Students utilize problemsolving 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.

0140 Animal Production and Management

This course is designed to be a core course in the Animal Systems concentration. The course will cover topics on animal restraint, animal management techniques, animal health and welfare, balancing rations, pedigree analysis 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.

0134 Agricultural Experience Program

The Supervised Agricultural Experience program is a hands-on, student planned way for them to apply skills learned in the classroom to real world agricultural experiences. With help from their agricultural teachers, students develop an SAE project based on one or more SAE categories: **Entrepreneurship, Placement, Research and Experimentation** and **Exploratory**.

Architecture and Construction Cluster

AR1820 Carpentry Pathway

Course One	1842	Carpentry I
Course Two	1843	Carpentry II
Course Three	1844	Carpentry III
Course Four	1845	Carpentry IV

Concentration Description:

The Carpentry concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the carpentry industry. Learners will be exposed to a broad range of construction careers and foundation knowledge including basic safety; plan reading; use of tools and equipment; basic rigging; and how to employ positive work ethics in their careers. Students will have the opportunity to earn NCCER certification for each skill set mastered.

Course Descriptions:

1842 Carpentry I

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.

1843 Carpentry II

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.

1844 Carpentry III

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.

1845 Carpentry IV

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.

Extra Electives: May or may not be offered...due to Carpentry enrollment

1763 Fundamentals of Electricity

This course introduces the student to the knowledge base and technical skills for Fundamentals of Electricity. Areas of study include electrical safety, electrical math concepts, and basic circuits. 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.

1829 Masonry and Plumbing

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.

AR1720 Drafting Pathway

Course One 1729 Fundamentals of Drafting

Course Two 1727 Drafting Techniques

Course Three 1725 Mechanical Drafting

Course Four 1721 Architectural Drafting

Concentration Description:

The Drafting concentration focuses a broad range of architecture and construction careers and foundation knowledge including basic safety, plan reading, use of tools and equipment as well as how to employ positive work ethics in a drafting career.

Course Descriptions:

1721 Architectural Drafting

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.

1725 Mechanical Drafting

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.

1727 Drafting Techniques

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.

1729 Fundamentals of Drafting

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.

AR1600 HVAC Technician (first two courses 2016-2017)

Course One 1752 HVAC I

Course Two 1753 HVAC II

Concentration Description:

The HVAC Technician concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the Heating, Ventilation, and Air Conditioning industry. Students will have the opportunity to earn NCCER certification for each skill set mastered and be exposed to skills to develop positive work ethics.

Course Descriptions:

1752 HVAC I

This course introduces the student to the knowledge base and technical skills of the HVAC industry. HVAC 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 HVAC such as Introduction to HVAC; and Trade Mathematics. 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.

1753 HVAC II

HVAC II will continue to build student skill sets in areas such as Copper and Plastic Piping Practices; Soldering and Brazing; Ferrous Metal Piping Practices; Basic Electricity; Introduction to Cooling; Introduction to Heating; and Air Distribution 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.

Arts and A/V Technology and Communications Cluster

AY1850 Graphic Design

Course One	1857	Fundamentals of Graphic Design
Course Two	1851	Fundamentals of Illustration
Course Three	1859	Graphic Design Applications
Course Four	1861	Illustration

Concentration Description:

The Graphic Design concentration focuses on careers in a number of occupations requiring creative design such as web page designer, layout artists, logo designer, flash designer, illustrator, photoshop artist, and a multimedia designer.

Course Descriptions:

1857 Fundamentals of Graphic Design

This course introduces the student to the knowledge base and technical skills for all courses in the Graphic Design concentration. Areas of study include equipment and materials, computer skills, copyright, design principles, customer specifications, and student organizations. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career

opportunities. 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 graphic design occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

1851 Fundamentals of Illustration

This course introduces the student to the knowledge base and technical skills necessary for all courses in the Graphic Design concentration. Areas of study include media applications, perspective, drawing and painting, and student organizations. Students will demonstrate knowledge and technical expertise in illustration. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. 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 graphic design occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

1859 Graphic Design Applications

This course introduces the student to basic advertising concepts and advanced layout procedures. Areas of study include demographics, mechanical preparation, vector and raster graphics, and student organizations. Students will demonstrate knowledge and technical expertise in the mechanical preparation of design projects. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. 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 graphic design occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

1861 Illustration

This course introduces the student to advanced topics in illustration. Areas of study include color theory, proportion, portfolios, and student organizations. Students will demonstrate knowledge and technical expertise in advanced illustration techniques. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. 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 graphic design occupations. Safety instruction is integrated into all activities. Students are encouraged to become active members of Skills USA for additional co-curricular opportunities that enhance student achievement, develop student leadership, and support experiential learning. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

Business Management and Administration Cluster

BM1465 Administrative Support

Course One	1401	Accounting Principles I
Course Two	1411	Business Computer Applications I Microsoft IT Word and Excel
Course Three	1439	Business and Marketing Essentials
Course Four	1413	Business Computer Applications II Microsoft IT PowerPoint and Access

Concentration Description:

The Administrative Support concentration focuses on careers that facilitate business operations through a variety of administrative and clerical duties including information and communication management, data processing and collection and project tracking.

Course Descriptions:

1401 Accounting Principles I

This course is designed to develop student understanding and skills in such areas as the basic principles, concepts and practices of the accounting cycle. Journalizing, posting and analyzing of financial statements 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 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.

1411 Business Computer Applications I Microsoft IT Word and Excel

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.

1439 Business and Marketing Essentials

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.

1413 Business Computer Applications II Microsoft IT PowerPoint and Access

This course is designed to develop student understanding and skills in such areas as Microsoft PowerPoint and Microsoft Access. This course prepares students for the Microsoft PowerPoint Office Specialist Exam and for the Microsoft Access 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.

BM0510 Career and Work Skills Training (CWST)

Course One	0511	Career and Work Skills Training I
Course Two	0512	Career and Work Skills Training II
Course Three	0513	CWST Work Experience I
Course Four	0514	CWST Work Experience II

Concentration Description:

The Career and Work Skills Training (CWST) concentration focuses on preparing students who need training in an occupational area for which there is no specific training program available OR who have received training in an occupational field and want to enhance that training through Cooperative Education. The curriculum focuses on the generic job-seeking and job keeping skills necessary for success in any career, including the skills identified in the report from The Secretary’s Committee on Achieving Necessary Skills (SCANS). Specific job skills are rarely taught in the classroom, rather, they are taught at the work site, using the Cooperative Education method. A typical program would enroll students with a wide range of occupational interests and place them at a variety of work sites.

Course Descriptions:

0511 Career and Work Skills Training I

This course is designed as the first course to develop student understanding and skills essential for job success. 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, DECA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

0512 Career and Work Skills Training II

This course is designed as the second course to develop student understanding and skills that are essential for job success. 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, DECA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

0513 CWST Work Experience I

This course is designed as the first course to develop student understanding and skills using on-the-job training that contributes to the over-all instructional program. The instruction, through written agreement between school and employers, is a combination of study in school with employment in the appropriate 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. Students are encouraged to become active members of the student organization, DECA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

0514 CWST Work Experience II

This course is designed as the second course to develop student understanding and skills using on-the-job training that contributes to the over-all instructional program. The instruction, through written agreement between school and employers, is a combination of study in school with employment in the appropriate 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. Students are encouraged to become active members of the student organization, DECA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Health Science Education Cluster

HE0723 Therapeutic Services

Course One	0711	Foundations of Health Science
Course Two	0715	Advanced Principles of Health Science
Course Three	0789	Clinical Specialties I
Course Four	0790	Clinical Specialties II

Concentration Description:

The Therapeutic Services Concentration allows the student to explore careers focused primarily on changing the health status of the patient over time. Health professionals in this concentration work directly with patients; they may provide care, treatment, counseling and health education information.

Course Descriptions:

0711 Foundations of Health Science

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.

0715 Advanced Principles of Health Science

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.

0789 Clinical Specialty I

This course is designed to allow the student to choose a career work-based experience from the following specializations:

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.

0790 Clinical Specialty II

This course is designed to allow the student to choose a career work-based experience from the following specializations:

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.

Hospitality and Tourism Cluster

HO1010 ProStart Restaurant Management

Course One	1013	Restaurant and Culinary Foundations
Course Two	1014	Restaurant and Management Essentials
Course Three	1019	Advanced Principles in Food Production
Course Four	1020	Restaurant Professional

Concentration Description:

The ProStart Restaurant Management concentration focuses on the skills needed for a successful employment in a restaurant environment, but has applicability for students interested in culinary nutrition, dietary services, and child nutrition services. ProStart curriculum integrates performance-based learning with academics, entrepreneurship, and technology skills to prepare students for successful employment in the 21st Century. 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 or FCCLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1013 Restaurant and Culinary Foundations

This course focuses on the basic preparation and service of safe food, basic introduction to industry safety standards, basic introduction to restaurant equipment, kitchen essentials in knife skills, stocks and sauces, and communication concepts in the restaurant industry. 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, DECA, FCCLA, or SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1014 Restaurant Management Essentials

This course is designed to focus management essentials in the restaurant industry, guest service, food production, and career exploration and pursuit. 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, DECA, FCCLA, or SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1019 Advanced Principles in Food Production

This course is designed to examine advanced food production, nutrition, and cost control. 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, DECA, FCCLA, or SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1020 The Restaurant Professional

This course is designed to provide content related global cuisine, sustainability, desserts and baked goods, and marketing. 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, DECA, FCCLA, or SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Information Technology Cluster

IT1450 Information management

Course One 1411 Business Computer Applications I Microsoft IT Word and Excel

Course Two 1431 Digital Imaging/Multimedia I

Course Three 1455 Web Page Publishing

Course Four Choose **ONE**: 1429 Desktop Publishing OR 1432 Digital Imaging/Multimedia

Concentration Description:

The Information Management concentration focuses on careers that produce images through hands-on activities and experiences which will include: operating a digital camera, using imaging software, using drawing software, creating simple animations and manipulating video images. Students will incorporate journalistic principles in design and layout of print and Web

publications including integration of text and graphics and use of sophisticated hardware and software to develop and create quality materials for business-related tasks. Students will analyze the information and the audience and combine appropriate text, graphics and design to communicate the desired message effectively.

Course Descriptions:

1411 Business Computer Applications I Microsoft IT Word and Excel

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.

1431 Digital Imaging/Multimedia I

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.

1455 Web Page Publishing

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.

Select One Course to Complete the Concentration:

E-Business Publishing (A)

1429 Desktop Publishing

This course is designed to develop student understanding and skills in such areas as journalistic principles in design and layout of print and Web publications including integration of text and graphics and use of sophisticated hardware and software to develop and create quality materials for business-related tasks. Students will analyze the information and the audience and combine appropriate text, graphics and design to communicate the desired message effectively. Planning and design principles are used to analyze and organize information, set up a design structure and to select or create appropriate visuals. Instructional strategies may include computer/technology applications, teacher demonstrations, collaborative instruction,

interdisciplinary and/or culminating projects, problem-solving and critical thinking activities, simulations and project-based learning 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, FBLA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

Interactive Media (B)

1432 Digital Imaging/Multimedia II

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.

IT440 Microsoft Computer Specialist (MCAS) WAHAMA JR/SR HIGH SCHOOL ONLY

Course One	1453	Microsoft IT Excel Expert
Course Two	1433	Microsoft IT Word Expert
Course Three	1413	Business Computer Applications II Microsoft IT PowerPoint and Access
Course Four	1427	Microsoft IT Outlook and OneNote

The Microsoft Applications Specialist (MCAS) concentration focuses on careers that facilitate business operations through a variety of administrative and clerical duties including information and communication management, data processing and collection and project tracking. This concentration prepares students to take and pass the Microsoft Office Specialists tests.

Course Descriptions:

1433 Microsoft IT Word Expert

This course is designed to develop student understanding and skills in such areas as Microsoft Word Expert. This course prepares students for the Microsoft Word Expert 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. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1453 Microsoft IT Excel Expert

This course is designed to develop student understanding and skills in such areas as Microsoft Excel Expert. This course prepares students for the Microsoft Excel Expert 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. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools and skill sets.

1413 Business Computer Applications II Microsoft IT PowerPoint and Access

This course is designed to develop student understanding and skills in such areas as Microsoft PowerPoint and Microsoft Access. This course prepares students for the Microsoft PowerPoint Office Specialist Exam and for the Microsoft Access 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.

1427 Microsoft IT Outlook and OneNote

This course is designed to develop student understanding and skills in such areas as Microsoft Outlook and OneNote. This course prepares students for the Microsoft Outlook Office and Microsoft Office OneNote exams. 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.

Manufacturing Cluster

MA1900 Machine Tool Technology

Course One	1901	Fundamentals of Machine Tool Technology
Course Two	1905	Fundamentals of Machine Processes
Course Three	1907	Machine Tool Operations
Course Four	1909	Metal Trades Processes and Applications

Concentration Description:

The Machine Tool Technology concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the Machine Tool Technology industry. Students will have the opportunity to earn NIMS certifications that are applicable to the trade.

Course Descriptions:

1903 Fundamentals of Machine Tool Technology

This course introduces the student to the knowledge base and technical skills of the Machine Tool Technology industry. In the Fundamentals of Machine Tool Technology class areas of study include hydraulic principles, practical application of hydraulic systems, pneumatic principles, and practical application of pneumatic 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 organizations, WV SkillsUSA. All West Virginia teachers are responsible for classroom instruction that integrates learning skills, technology tools, and skill sets.

1905 Fundamentals of Machine Processes

Fundamentals of Machine Processes will continue to build student skills in areas such as intermediate hand tools, power tools, measuring tools, vertical band saw, surface grinding, metal lathe operations, and milling machine operations. 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.

1907 Machine Tool Operations

This course introduces the student to the knowledge base and technical skills for concepts in Machine Tool Operations. Areas of study include grinding techniques, lathe operations, milling operations, and CNC machining. 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.

MA1980 Welding

Course One	1862	Welding I
Course Two	1863	Welding II
Course Three	1864	Welding III
Course Four	1865	Welding IV

Concentration Description:

The Welding concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the Welding industry. Students will have the opportunity to earn both NCCER certification and the WV Welding Certification for each skill set mastered and be exposed to skills to develop positive work ethics.

Course Descriptions:

1862 Welding I

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.

1863 Welding II

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.

1864 Welding III

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.

1865 Welding IV

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.

Transportation, Distribution and Logistics Cluster

TR1620 Automotive Technology

Course One	1631	Automotive Technology MLR-1
Course Two	1623	Automotive Technology MLR-2
Course Three	1625	Automotive Technology MLR-3
Course Four	1637	Automotive Technology MLR-4

Concentration Description:

The Automotive Technology concentration focuses on careers that will build a knowledge base and technical skills in all aspects of the automotive industry. Skill set standards for Career Preparation Skills, Safety, Leadership Development and Customer and Personal Service have been integrated throughout the concentration. Student skills sets will be acquired for Automotive Maintenance and Light Repair in the areas of Automotive Service Consultant, Tire Repair and Replacement, Maintenance Services, Electrical System Diagnosis and Repair, Engine and Engine Performance Diagnosis and Repair, Heating and Air Conditioning Diagnosis and Repair, Brake System Diagnosis and Repair, Suspension and Steering Diagnosis and Repair, and Driveline Diagnosis and Repair. Students will have the opportunity to acquire hours towards industry certification and be exposed to skills to develop positive work ethics.

Course Descriptions:**1631 Automotive Technology MLR-1**

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.

1623 Automotive Technology MLR-2

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.

1625 Automotive Technology MLR-3

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.

1637 Automotive Technology MLR-4

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.