

Course Descriptions

Agriculture

****All MCHS Agriculture classes will utilize FFA activities as an integral component of course content. Leadership development opportunities will be provided through the National FFA Organization.**

Agriscience (030711)

Credit: 1

Grade Level: 9-10

Agriscience introduces the scientific agricultural approach to plant/land science and animal science. Agricultural career opportunities will be emphasized in each class. This course will serve as the introductory course to the Ag Ed curriculum covering a range of topics from FFA, animal science, plant science, ag mechanics, and environmental/natural resources. Laboratory experiences relating to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. **This course is a prerequisite for all other agriculture courses.**

Emerging Agriculture Technology (030718)

Credit: 1

Grade Level: 9-10

Prerequisite: *Principles of Agriscience as an 8th grader or Agriscience*

Emerging Agriculture Technology focuses on automation and advancement in agriculture. Students will learn about precision agriculture (GPS/navigation/drones), artificial intelligence, robotics, energy sources/efficiency, basic principles of electricity, and other current practices involved in improving efficiency in the production of agricultural products.

Agricultural Construction Skills (010241)

Credit: 1

Grade Level: 10-11

The primary focus of Agricultural Construction Skills will be to introduce students to basic skills involved in the various forms of construction and mechanics. The course will help students develop skills such as shop safety, tool identification, project planning, interpreting plans, calculating a bill of materials, electrical wiring, painting, welding, and metalworking.

Small Power Equipment (010231)

Credit: 1

Grade Level: 10-11

This course covers the theory and application involving the internal combustion engine as they relate to the small engines industry. Students will learn about 2 stroke vs. 4 stroke cycles, diesel vs. gasoline engines, and in-depth study of the various engine systems (compression, lubrication,

cooling, governor, field and electrical). Hands-on applications will be provided in the shop through the disassembly/assembly of small engines, troubleshooting, and basic service and repair of small power equipment.

Agricultural Structures & Design (010211)

Credit: 1

Grade Level: 11-12

This course prepares students to evaluate, design and construct buildings and structures. Topics covered include: workplace safety, career exploration, structural design, evaluation and interpretation of construction plans, calculating a bill of materials, carpentry, insulation, plumbing, masonry, roofing, and siding. Students will use skills covered in class to construct a framed structure.

Animal Science (020501)

Credit: 1

Grade Level: 9-11

Animal Science develops basic knowledge and skills pertaining to livestock identification, selection, nutrition, reproduction and genetics, health management, and marketing of one or more species of farm animals. The latest biotechnological applications will be included. The content may be enhanced with appropriate computer applications.

Wildlife Resources (030611)

Credit: 1

Grade Level: 10-12

This course helps students develop an awareness of wildlife industry resources. The primary focus is a study of ecology and ecosystems, wildlife habitat, population dynamics, management techniques that deal with wildlife in all areas and the regulations that affect the wildlife industry. Content may be enhanced with appropriate applied scientific laboratory activities and computer applications. Students will obtain a hunter education orange card.

Animal Technology (020502)

Credit: 1

Grade Level: 10-12

Prerequisite: *Animal Science & Equine/Small Animal Technology*

Animal Technology instruction concentrates on the advanced production practices and current biotechnological applications of one or more species of farm animals, based on the local community needs. Hands-on experiences will be emphasized. Content may be enhanced by utilizing appropriate computer applications.

Intro to Greenhouse & Crop Production (010611)**Credit: 1****Grade Level: 10-11, 9 (if the student had Agriscience as an 8th grader)**

This course introduces the basic principles of plant science such as soils, plant anatomy, fertility, propagation, and how those principles relate to the production of horticultural and field crops. Students will utilize the greenhouse facilities to gain hands-on applications of the principles covered in class.

Equine Science/Small Animal Technology (020510)**Credit: 1****Grade Level: 10-12**

Equine Science develops knowledge and skill pertaining to breed identification and selection, anatomy, physiology, nutrition, genetics, and reproductive management, training principles, grooming, health disease, parasite control and sanitation practices relevant to the horse industry. Small Animal Technology covers many of the same concepts as they relate to the care of dogs, cats, rabbits, and other similar animals. Content may be enhanced with appropriate computer applications. Dual credit is available through Murray State University (AGR 100).

Greenhouse Technology (010641)**Credit: 1****Grade Level: 10-12****Prerequisite: *Intro to Greenhouse & Crop Production***

Greenhouse Technology provides instruction in greenhouse structures and greenhouse environment regulations, plant growth and development, propagation, production and maintenance of bedding and container produced plants, and principles of vegetable production. This is an extension of what is covered in Intro to Greenhouse and the majority of the class will be spent in the greenhouses doing lab work. Content may be enhanced with appropriate technology.

Floriculture & Floral Design (010621)**Credit: 1****Grade Level: 10-12****Prerequisite: *Intro to Greenhouse & Crop Production***

Floriculture and Floral Design provides instruction to develop floral design techniques using silk, dried, and fresh flowers, operation management techniques of a florist business, identification, production, and cultural maintenance practices of plants used in floral design and interior landscaping. Content may be enhanced utilizing appropriate technology. This course can fulfill the Arts & Humanities requirement for Ag pathway students.

Agriculture Employability Skills (010121)**Credit: 1****Grade Level: 11-12**

Agricultural Employability Skills provides opportunities to develop skills in job searching, preparing resumes, writing letters of application, job interviews, attitude at work, communicating effectively through speeches and presentations, human relations, and accepting responsibilities.

Ag. Co-Op (030790)**Credit: 1-4****Grade Level: 12**

This course will be offered to seniors who meet all school and ag department requirements for co-op. Participants must be on track to complete one of the Agriculture Career Pathways.

AGR 100: Animal Science (Dual Credit through Murray State)**Credit: 1****Grade Level: 11-12**

This course is taken in conjunction with Equine Science/Small Animal Technology through dual enrollment. This is a freshman level college course in animal science including the importance and place of livestock in agriculture types, market classes, and grades of beef, sheep, and swine, origin and characteristics of breeds, and the judging of beef, sheep, and swine. Opportunity is provided for students to earn three (3) hours of introductory college credit. Content may be enhanced by utilizing appropriate computer applications.

AGR 182: Vet Science (Dual Credit through Murray State)**Credit: 1****Grade Level: 11-12****Prerequisite: *Animal Science, Equine/Small Animal Tech & Animal Technology***

This course is taken in conjunction with Veterinary Science through dual enrollment. This is a freshman level college course which introduced students to a survey of genetics reproductive physiology, growth and development, nutrition and digestive physiology, anatomy, meat science, animal classification, current issues and overview of the dairy, poultry, equine, beef, sheep, swine, and aquaculture industries. Opportunity is provided for students to earn three (3) hours of introductory college credit. Content may be enhanced by utilizing appropriate computer applications.

AGR 199: Contemporary Issues in Ag (Dual Credit through Murray State)**Credit: 1****Grade Level: 11-12**

This class is taken in conjunction with ag Employability Skills through dual enrollment. This course is designed to increase the understanding, awareness, and critical analysis of contemporary agricultural issues and their effect upon the social, political, economic and cultural aspects of society. Topics will include environmental issues, biotechnology, animal, crop, career, economy and trade, agricultural policy, food quality, safety and international agriculture issues. Opportunity is provided for students to earn three (3) hours of introductory college credit. Content may be enhanced by utilizing appropriate computer applications.

AGR 180: Greenhouse Production (Dual Credit through Madisonville Comm.)**Credit: 1****Grade Level: 12****Prerequisites: *Instructor Approval***

Students that have completed Greenhouse Technology may apply to work in the Greenhouse or Hydroponics Greenhouse their senior year and gain college credit through the MCC Agriculture program. Students will handle day to day operations of the greenhouses under the supervision of the ag instructor. They will be assigned to the greenhouse instructor during the same period as the Greenhouse Technology course is taking place.

Army JROTC**JROTC LET 1 (580240)****Credit: 1****Grade Level: 9-12**

This course is the first of four core courses in the Army Junior Reserve Officers' Training Corps (JROTC) high school program. This course supports 22 lessons designed for first-year Cadets, and are focused on helping to develop strong leaders and model citizens. Cadets are introduced to content that will help the inner leader begin to emerge through knowledge, skills, and abilities acquired in seven chapters of study. Successful completion of this course for 9th grade will account for the student's Health/PE requirement.

JROTC LET 2 (580241)**Credit: 1****Grade Level: 10-12****Prerequisite: *JROTC LET 1***

This course builds upon the mastery of LET 1 skills and abilities, providing Cadets with new and more challenging opportunities in leadership development. There are 24 active-learning lessons within nine chapters.

JROTC LET 3 (580242)**Credit: 1****Grade Level: 11-12****Prerequisite: *JROTC LET 2***

This Supervising Leader course builds upon the mastery of LET 1 and 2 skills and abilities, providing Cadets with new and more challenging opportunities as a leader by overseeing planning, project implementation, and team personnel. Cadets at this level can acquire battalion staff positions and responsibilities while helping to integrate improvements in the local JROTC program and community. There are 20 active-learning lessons within seven chapters.

JROTC LET 4 (580243)**Credit: 1****Grade Level: 12****Prerequisite: *JROTC LET 3***

This Managing Leader course provides Cadets multiple opportunities to manage and lead in the battalion, in the school, and their respective communities. The LET 4 Cadet is ready to assume responsibilities and manage him or herself and others whom they work with or oversee as a Cadet manager. There are 12 active-learning lessons within five chapters.

JROTC Leadership (580244)**Credit: 1****Grade Level: 9-12**

This course is designed to assist students with developing skills needed to be successful leaders and responsible members of society. The students will develop personal attributes and social skills. An emphasis will be placed on interpersonal skills, team building, communication, personal development and leadership. This course will include opportunities for students to apply their knowledge.

Automotive Technology**Special Topics: Automotive (470566)****Credit: 1****Grade Level: 10**

This course introduces the basic principles of sound and efficient shop management. Inventory control, fiscal management, and customer relations are emphasized. This course also explores the science of troubleshooting and the importance of proper maintenance procedures: how to work well with others, aids in communication, and trade responsibilities. The course also examines actual troubleshooting techniques, aids in troubleshooting, and how to use schematics and symbols. The course focuses on specific maintenance tasks such as solving mechanical and electrical problems, breakdown maintenance, and the how's and why's of planned maintenance.

Automotive Maint. & Light Repair A (470507)**Credit: 1****Grade Level: 11****Prerequisite: *Special Topics: Automotive*****Automotive Maintenance & Light Repair Section B (470509)****Credit: 1****Grade Level: 11****Prerequisite: *Auto MLR Section A*****Automotive Maintenance & Light Repair Section C (470511)****Credit: 1****Grade Level: 12****Prerequisite: *Auto MLR Section B*****Automotive Maintenance & Light Repair Section D (470513)****Credit: 1****Grade Level: 12****Prerequisite: *Auto MLR Section C***

These courses introduce the students to the principles, theories, and concepts of Automotive Technology, and include instruction in the maintenance and light repair of Engines, Brake Systems, Electrical/Electronic Systems, Suspension and Steering Systems, Automatic and Manual Transmission/Transaxles, and Engine Performance Systems. In all areas, appropriate theory, safety, and support instruction will be taught and required for performing each task, including proper care and cleaning of customer's vehicles. The instruction will also include identification and use of appropriate tools and testing/measurement equipment required to accomplish certain tasks. The students will also receive the necessary training to locate and use current reference and training materials from accepted industry publications and resources, and demonstrate the ability to write work orders.

Business Education**Computer Literacy (110110)****Credit: 1****Grade Level: 9-12**

This course provides an introduction to the computer and the convergence of technology as used in today's global environment. The course introduces topics including computer hardware and software, file management, the Internet, e-mail, social web, green computing, AR and VR, security and AI fundamentals. Instruction of the course presents the basic use of application, programming, systems, and utility software. *Dual Credit is available through Madisonville Community College (CIT 105).* **This course is a prerequisite for all other business courses.**

Business & Marketing Essentials (060111)**Credit: 1****Grade Level: 10-11****Prerequisite: *Digital Literacy/Computer Literacy or CIT 105***

Business and Marketing Essentials is an introductory business course which enables students to acquire a realistic understanding of business processes and activities. Students examine fundamental economic concepts, the business environment, and primary business activities. They develop an understanding of and skills in such areas as customer relations, economics, emotional intelligence, financial analysis, human resources management, information management, marketing, operations, professional development, and strategic management. Throughout the course, students are presented ethical dilemmas and problem-solving situations for which they must apply academic and critical thinking skills. Leadership will be provided through DECA.

Accounting & Finance Foundations (060122)**Credit: 1****Grade Level: 11-12****Prerequisite: *Business & Marketing Essentials***

This course will provide an introduction to both areas of accounting and finance. Topics will include banking, credit, financial literacy, career exploration, spreadsheet usage, and technical writing. The accounting principles taught in this course are based on a double-entry system and include preparing bank reconciliations, payroll taxes, and financial statements. Detailed career exploration in the various fields of accounting will be available. Technical writing will be provided through IPAC business plan curriculum and exploration of case studies. Leadership development will be provided through DECA.

Financial Services I & II (060311/060351)**Credit: 1****Grade Level: 12****Prerequisites: *Accounting & Finance Foundations***

This course is designed for 12th grade students interested in pursuing a career in the financial institution field. It involves operation of a student financial center in cooperation with a sponsoring bank, which provides application of banking and financial procedures and concepts. Leadership development will be provided through DECA. (This course is cross-referenced with Marketing Education)

Multimedia Publishing (060751)**Credit: 1****Grade Level: 11-12**

This hands-on course applies publishing and presentation concepts through the development of sophisticated business documents and projects. These documents include, but are not limited to, tri-fold brochures, manuscripts, reports, bi-fold programs, catalogs, newsletters, flyers, business forms, graphs, web pages, on-screen presentations, and video productions. Equipment such as scanners, digital cameras, video cameras, and color laser printers may be utilized in creating the documents. Formatting, editing, page layout, and design concepts are taught. Distribution ready publication standards are applied to all projects. Students will develop communication skills, problem-solving techniques, cooperative learning, and interpersonal skills. Leadership development will be provided through DECA.

Computer Science**Computational Thinking (110251)****Credit: 1****Grade Level: 10-12****Prerequisites: *Digital/Computer Literacy***

This course promotes understanding of computer programming and logic by teaching students to think like a computer. It covers skills needed to develop and design language-independent solutions to solve computer-related problems. Instruction covers development and design basics including use of variables, control and data structures, and principles of command-line and object-oriented languages. Students spend at least 20 hours of programming and applying learned concepts through programming.

Game Design & Development Principles (113605)**Credit: 1****Grade Level: 11****Prerequisites: *Computational Thinking***

This course is an introduction to Game Design and Gaming. The course provides an overview of story development, gaming history, game reviews, current gaming trends, and industry software. Students will begin to create and develop a game story/plot that can be further developed in higher level courses as well as critique current games. In addition, 2D game development software and image manipulation will be explored to further enhance their design skills. Career exploration into game design will be researched and gain awareness of job and postsecondary opportunities. Students spend at least 20 hours programming and applying learned concepts through programming. Programming is defined by the K-12 CS Framework as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them.

Advanced 3D Game Development (113603)**Credit: 1****Grade Level: 12****Prerequisite: *Game Design & Development Principles***

This course emphasizes creating 3D graphics using one or more state-of-the-art software packages. Instruction provides students with a thorough understanding of techniques for designing advanced 3D games and simulations. Courses will cover 2D and 3D graphics, animation, character development, texturing, rigging, scripting and game setup using state-of-the-art software development tools. Students spend at least 20 hours programming and applying learned concepts through programming. Programming is defined by the K-12 CS Framework as the craft of analyzing problems and designing, writing, testing, and maintaining programs to solve them.

App Development with Swift (110821)**Credit: 1****Grade Level: 11-12****Prerequisites: *Computational Thinking***

This course allows students to build a foundation in Swift, UIKit, and networking through hands-on labs and guided projects. At the end of each of the first five units, students will complete guided projects. Through these projects, students will create features that interest them, all while performing the type of work they can expect in an app development workplace. In the last unit, students will examine how to design, prototype, and architect an app of their own design. Students spend at least 20 hours of programming and applying learned concepts through programming.

Cybersecurity (110230)**Credit: 1****Grade Level: 12****Prerequisites: *App Development***

This course introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. This course raises students' knowledge of and commitment to ethical computing behavior. Students will learn the components of cybersecurity and the role each plays in preventing, detecting, and mitigating vulnerabilities and attacks.

English

English 1 (230107)

Credit: 1

Grade Level: 9

English 1 focuses on creating strong foundational skills in reading and writing so students may build upon these abilities in subsequent years. Students will read a wide variety of literature and nonfiction texts, which they will then use to produce a variety of compositions for further analysis, revision and publication. The theme of the year is “Choose Well,” which is reflected through the major texts, in order to facilitate students’ exploration and evaluation of their own choices as it impacts their lives today and in the future.

Accelerated English 1 (230107P)

Credit: 1

Grade Level: 9

Prerequisite: *Teacher recommendation*

Accelerated English 1 is designed to give all students the opportunity to learn the foundation knowledge and skills they need to be in successful advanced classes. This course is intended for those students who have demonstrated a mastery of the many skills detailed in the English 1 course description. They should write proficiently, read insightfully, and articulate skillfully. Students will read a wide variety of literature and nonfiction texts, which they will then use to produce a variety of compositions for further analysis, revision, and publication.

English 2 (230110)

Credit: 1

Grade Level: 10

English 2 emphasizes reflective and persuasive forms of communication. Students use the writing process to produce effective arguments that include information from primary and secondary sources. Students will read widely and critically, analyzing and responding to a variety of literature including American and world authors focusing on the theme “Stand Tall” which explores the concept of the Hero. English 2 reinforces study skills, library skills, language usage, composition methods, reading competence, and literature appreciation.

Accelerated English 2 (230110P)

Credit: 1

Grade Level: 10

Prerequisite: *Teacher recommendation*

Accelerated English 2 is designed to give all students the opportunity to learn the foundation knowledge and skills they need to be in successful advanced classes. This course is intended for those students who have demonstrated a mastery of the many skills detailed in the English 2 course description including reflective and persuasive forms of communication. They should write proficiently, read insightfully, and articulate skillfully. Students use the writing process to

produce effective arguments that include information from primary and secondary sources as well as other complex texts. Students will read widely and critically to a greater depth, analyzing and responding to a variety of literature including American and world authors.

English 3 (230113)

Credit: 1

Grade Level: 11

English 3 is a survey of American literature and literary culture from its inception through the twentieth century focusing on the theme “Dream Big.” Students will explore the major literary forms, themes, authors, and periods of American literature through fiction and nonfiction texts. Students will build on skills learned as freshmen and sophomores to enhance their ability to analyze an author’s words and arguments. This course provides the source for critical thinking and literary essays. Emphasis in composition include argumentative and informative essays as well as rhetorical analysis requiring the use of technology to produce error-free compositions. Students will continue to focus on mechanics, usage, grammar, and vocabulary.

Accelerated English 3 (230113P)

Credit: 1

Grade Level: 11

Prerequisite: *Teacher recommendation*

Accelerated English 3 is designed to give all students the opportunity to grow in the knowledge and skills needed to be successful in advanced classes. This course focuses on improving proficiency in writing a variety of forms, literary analysis of complex texts, and speaking, listening, and language skills. Students will, among other things, produce synthesis writing, develop and craft research projects, deconstruct and debate American literature and nonfiction, present speeches, and link the content to their own lives and the world.

English 4 (230116)

Credit: 1

Grade Level: 12

English 4 is designed to present a wide range of reading experiences with print and non-print materials that have literary, informational, persuasive, and practical purposes. The course also requires students to use the writing process and criteria for effective writing to demonstrate their abilities to write in a variety of forms and for multiple audiences and purposes. Students use various writing strategies to make sense of their reading and thinking experiences. Speaking, listening, and observing skills are used to communicate information for a variety of authentic purposes. In addition, students continue to integrate inquiry skills and technology to communicate ideas. Students will continue to focus on mechanics, usage, grammar, and vocabulary.

ENG 101: Writing I (Dual Credit through MCC)**Credit: 1****Grade Level: 11-12****Prerequisite: *ACT Reading score of 20/ACT English score of 18***

The goals of this course are to introduce students to college-level writing and critical reading, to give students instruction and practice writing and reading college-level essays, and to make students aware of how various audiences and rhetorical situations call for different choices in language, structure, format, and tone. Students receive instruction and practice that allows them to clearly articulate their audience, purpose and rhetorical situation for writing assignments.

ENG 102: Writing II (Dual Credit through MCC)**Credit: 1****Grade Level: 12****Prerequisite: *Successful completion of ENG 101***

This course emphasizes argumentative writing and provides further instruction in drafting and systematically revising essays that express ideas in Standard English. It includes continued instruction and practice in reading critically, thinking logically, responding to texts, addressing specific audiences, and researching and documenting credible academic sources.

Journalism (239111)**Credit: 1****Grade Level: 10-12**

Content for this course may vary. Possible topics may include: information gathering, writing, editing/proofreading, layout and production in print, digital and online formats.

Family & Consumer Sciences**FACS Essentials (200113)****Credit: 1****Grade Level: 9-10**

This course includes basic knowledge in nutrition, food preparation, human development, STD prevention, communication, money management, sewing, design principles, goal selection, and career readiness.

Foods & Nutrition (200441)**Credit :1****Grade Level: 10-12****Prerequisite: *FACS Essentials***

This course includes classroom instruction in food safety, sanitation, nutrition, how to read a recipe, proper measuring techniques, and skills used in food preparation. Students will work in groups while preparing basic recipes such as: quick breads, yeast breads, cookies, pies, cakes, knife skills, sauces, etc.

Culinary Arts I (200411)**Credit: 1****Grade Level: 11-12****Prerequisite: *Foods & Nutrition***

This course will provide training for employment in the hospitality industry in the area of food service. Career decisions and demands on family life are explored as well as skills and ideas related to supportive services such as public relations and beverage operations, management techniques, and business ownership. Class will cater meals for various groups in the county.

Culinary Arts II (200412)**Credit: 1****Grade Level: 11-12****Prerequisite: *Culinary Arts I***

This course will continue progress in training in food production and services. Food service management skills are introduced. More in-depth information is provided and high levels of skills are taught. Food preparation, bakery operation, dinner catering, model restaurant, safety, sanitation, receiving, storing and issuing foods are discussed.

Culinary Co-Op (200409)**Credit: 1-2****Grade Level: 12****Prerequisite: *Culinary Arts II & instructor permission***

This course will be offered to seniors who have completed their required pathway classes with no less than a "B." Students will be required to work in the food service industry the number of hours they are absent from school hours. They must be able to drive and provide a valid driver's license and car insurance. Students must be on track to complete the Culinary Arts pathway.

Early Lifespan Development (200223)**Credit: 1****Grade Level: 10-12****Prerequisite: *FACS Essentials***

This course is designed to give students a basic understanding of the development of pregnancy, progression of labor, birth defects, and the development of infants from birth until school age years. During this course, students create and care for a "flour baby," experience a simulated pregnancy, and care for a real care infant.

Child Development Services I (200261)**Credit: 1****Grade Level: 11-12****Prerequisite: *Early Lifespan Development***

This course provides training for future career opportunities in working with children such as day care centers, elementary schools, and private institutions. Students study guidance, teaching, and management of young children. Topics covered in this class are reinforced through hands-on experience volunteering in our community's elementary schools.

Child Development Services II (200262)**Credit: 1****Grade Level: 11-12****Prerequisite: *Child Development Services I***

This course is designed to aid students in hands-on knowledge of working with young children. During this course, students volunteer in our community's day care centers or elementary schools.

Child Development Services Co-Op (200210)**Credit: 1-2****Grade Level: 12****Prerequisite: *Child Development Services II & instructor permission***

This course will be offered to seniors who have completed their required pathway classes with no less than a "B." Students will be required to work in childcare the number of hours they are absent from school. They must be able to drive and provide a valid driver's license and car insurance. Students must be on track to complete the Child Development Services pathway.

Health Sciences**Introduction to Health Sciences (170199)****Credit: 1****Grade Level: 9**

This course introduces students to basic health concepts and skills for those interested in or planning a career in health care. Basic body mechanics, career options, health care delivery systems, caregiver/client relationships, infection control, basic assessment skills, soft skills, team-building skills and problem-based learning are included. This class will be an introduction to various health related topics to prepare students for future classes and careers in the medical field.

AHS 115/KHP 190: Medical Terminology/Emergency Procedures (Dual Credit) Credit: 1

Grade Level: 10-12

This course is an intense study of the medical language used in all health career major areas. Pronunciation, spelling, and application rules of medical terminology are included. This course also includes foundational emergency skills for all Health Science Career Pathway students. This will include certifications in: Cardiopulmonary Resuscitation for the Healthcare Provider; AED; bloodborne pathogen; first-aid; and emergency care as outlined by an approved first-aid/CPR/Bloodborne Pathogen certifying agency as put forth by the American Heart Association, National Safety Council or American Red Cross. Dual credit is available through Madisonville Community College.

AHS 105: Principles of Health Science (Dual Credit through MCC) Credit: 1

Grade Level: 10-12

This course is an orientation and foundation for occupations and functions across the healthcare cluster. It includes broad healthcare core standards which specify the knowledge and skills that the vast majority of healthcare workers should have. The course focuses on exploring health career options, history of health care, ethical and legal responsibilities, leadership development, safety concepts, health care systems and processes, and basic health care industry skills. This introductory course may be a prerequisite for additional courses in the Health Science program.

NAA 100: Medicaid Nurse Aide (Dual Credit through MCC) Credit: 1

Grade Level: 11-12

Prerequisites: Medical Terminology/Emergency Procedures & Principles of Health Science

This course is an instructional program that prepares individuals by providing the knowledge and skills needed to perform routine nursing-related services to patients in hospitals or long-term care facilities, under the training and supervision of an approved registered nurse or licensed practical nurse. The focus is on communication, infection control, safety, resident/patient rights, and basic nursing skills. State Registry is available upon successful completion of the state written and performance examination.

Introduction to Behavioral Health (170908) Credit: 1

Grade Level: 11-12

Prerequisite: Principles of Health Science

This foundational course is crafted to equip students with an understanding of how Behavioral Health shapes society, exploring its influence on historical and modern health and wellness trends. It also allows an insight into the critical aspect of self-care, acknowledging that the nurturing of one's own mental health is not only vital for personal well-being but is also indispensable for fostering overall wellness of individual patients they serve.

Allied Health Core Skills (170501)**Credit: 1****Grade Level: 11-12****Prerequisite: Principles of Health Science**

This course is designed to provide knowledge, concepts, and psychomotor skills necessary for gainful employment as an entry level healthcare worker. Assisting students in selecting a career major, classroom instruction and educational objectives are combined with learning experiences and observations and clinical rotations.

Allied Health Co-Op (170503)**Credit: 1-2****Grade Level: 12****Prerequisite: *Instructor Permission***

This course is offered to seniors who meet the school and Allied Health pathway requirements. Students will be required to work in an approved workplace related to the pathway with no less than the number of hours the student leaves from school for the job placement. The students must be able to drive and provide a valid driver's license and car insurance.

Nursing Co-Op (170601)**Credit: 1-2****Grade Level: 12****Prerequisite: *Instructor Permission***

This course is offered to seniors who meet the school and Nursing pathway requirements. Students will be required to work in an approved workplace related to the pathway with no less than the number of hours the student leaves from school for the job placement. The students must be able to drive and provide a valid driver's license and car insurance.

Industrial Electricity**Electrical Shop Management/Basic Troubleshooting (470301)****Credit: 1****Grade Level: 10; 9 (with teacher recommendation)**

This course introduces the basic principles of sound and efficient shop management. Inventory control, fiscal management, and customer relations are emphasized. This course also explores the science of troubleshooting and the importance of proper maintenance procedures: how to work well with others, aids in communication, and trade responsibilities. The course also examines actual troubleshooting techniques, aids in troubleshooting, and how to use schematics and symbols. The course focuses on specific maintenance tasks such as solving mechanical and electrical problems, breakdown maintenance, and the how's and why's of planned maintenance.

Circuits I (460316)**Credit: 1****Grade Level: 11****Prerequisite:** *Shop Management/Basic Troubleshooting*

This course is an introduction to basic theory of DC and AC circuits, including circuit analysis techniques, introductory magnetism and transformer principles. The course emphasizes design, construction, and troubleshooting of simple DC and AC circuits in laboratory exercises.

Electrical Construction 1 (460312)**Credit: 1****Grade Level: 11****Prerequisite:** *Circuits I*

This course involves the study of materials and procedures used in construction wiring. It also focuses on the operation, installation, and application of AC single-phase and three-phase transformers. The course emphasizes testing and maintaining transformer equipment, with safety integrated as a core component of the study.

Rotating Machinery (460323)**Credit: 1****Grade Level: 12****Prerequisite:** *Electrical Construction I*

This course focuses on the underlying principles of rotating electrical equipment including DC and AC meters and generating equipment construction, operating applications and the maintenance of DC and AC motors and generating equipment.

Electrical Motor Controls (460331)**Credit: 1****Grade Level: 12****Prerequisite:** *Rotating Machinery*

This course addresses the diversity of control devices and applications used in industry today. Safety and electrical lockouts are also included.

Mathematics**Algebra 1/Accelerated Algebra 1 (270304/270304A)****Credit: 1****Grade Level: 9**

This course will cover the core standard topics including topics of number sense, linear and exponential relationships, expressions, and equations. Students will also explore functions, quadratic relationships and mathematical modeling. *This course is required for high school graduation.*

Geometry/Accelerated Geometry (270401/270401A)**Credit: 1****Grade Level: 10-11****Prerequisite: *Algebra 1***

This course will cover the core standard topics including problem solving with angles, polygons, line segments, parallel and perpendicular lines. Also covered are polygons, basic proofs, similarity, trigonometry, and solids. This course is designed to provide a foundation of geometric principles and applications. *This course is required for high school graduation.*

Algebra 2 (270311)**Credit: 1****Grade Level: 10-12****Prerequisite: *Algebra 1***

This course will cover the core standards topics including linear, quadratic, and polynomial functions; rational and radical relationships; as well as logarithmic and exponential functions. *This course is strongly recommended for students who plan to attend college after high school.*

Accelerated Algebra 2 (270311S)**Credit: 1****Grade Level: 10-12****Prerequisite: *Algebra 1 and Geometry***

Accelerated Algebra 2 is designed for those students considering a STEM-related career. In addition to the core standard topics taught in Algebra 2, this honors level course will explore how math concepts relate to science, technology, and/or engineering through project-based work.

Trigonometry (270631)**Credit: 1****Grade Level: 10-12****Prerequisite: *Must have taken or be enrolled in Algebra 2***

This course is designed for students who want to proceed further into aspects of trigonometry. Topics include trig ratios, law of sines and cosines, the unit circle, trigonometric graphs, and basic trig identities. Applications of these topics will be emphasized throughout the course.

Math Concepts (270661)**Credit: 1****Grade Level: 11****Prerequisites: *Algebra 1 and Geometry***

This course is for students who need additional time and support to master algebraic concepts. There is a strong emphasis on real world applications and/or connections with other disciplines. Topics include: solving basic equations, ratios, unit conversions, proportions, surface area, volume, etc.

Pre-Calculus (270501)**Credit: 1****Grade Level: 11-12****Prerequisite: *Grade of A or B in Algebra 2***

The content of this course is beneficial for students' success in higher level mathematics courses. This course is designed to build on algebraic concepts. Topics include: analyzing functions graphically, analytically, and numerically; analyzing and graphing higher order polynomials; analyzing and graphing rational functions; etc.

AP Calculus AB (270513)**Credit: 1****Grade Level: 11-12****Prerequisites: *Grade of A or B in Pre-Calculus***

This course is designed for students who plan to take upper level college mathematics courses. It is a thorough introduction to calculus including such topics as limits, derivatives, and basic integrals.

Math for Business & Industry (080780)**Credit: 1****Grade Level: 12**

This course focuses on teaching students financial literacy. Topics include: personal finance, budgeting, saving money, credit, debt, consumer awareness, college planning, financial services, insurance, income, taxes, investing, and retirement.

Probability & Statistics (270602)**Credit: 1****Grade Level: 11-12****Prerequisite: *Algebra 2***

This course is designed as an introductory probability and statistics class. It addresses such concepts as theoretical and experimental probability, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and dispersion, and methods of inferential statistics.

MAT 150: College Algebra (Dual Credit through MCC)**Credit: 1****Grade Level: 11-12****Prerequisites: *Algebra 2 and Math ACT score of 22***

This course is a college level algebra course. Topics include: in-depth look at solving and graphing linear, quadratic, polynomial, exponential, and logarithmic functions.

MAT 220: Probability and Statistics (Dual Credit through MCC)**Credit: 1****Grade Level: 12****Prerequisite: *MAT 150***

This course is a college level statistics course. Students must have completed MAT 150. Topics addressed include: theoretical and experimental probability, binomial distributions, normal distributions, displaying and describing distributions of data, collecting data, measures of central tendency and dispersion, and methods of inferential statistics.

Maintenance Machinist**Maintaining Industrial Equipment (470318)****Credit: 1****Grade Level: 11**

This course is designed to introduce the student to maintenance techniques and procedures used to maintain industrial equipment.

Welding for Maintenance (470328)**Credit: 1****Grade Level: 11****Prerequisite: *Maintaining Industrial Equipment***

This course will provide basic instruction needed for students to weld using SMAW, MIG, TIG, and Oxy-Fuel.

Fundamentals of Machine Tools A (470313)**Credit: 1****Grade Level: 12****Prerequisite: *Welding for Maintenance***

This course provides the basic principles needed for a solid foundation in machine tool technology. Areas and machines covered include shop safety, benchwork, drill press, power saw, measurement, mills, and lathes.

Fundamentals of Machine Tools B (470314)**Credit: 1****Grade Level: 12****Prerequisite: *Fundamentals of Machine Tools A***

This course provides an intermediate skill development in machine tool technology. The course builds on basic skills developed in MTT 110, especially in the calculation of safe cutting speed and feed rates for the drill press, power saw, mills, and lathes. Shop safety, benchwork, and precision measurement are also emphasized.

Blueprint Reading for Machinists (470921)**Credit: 1****Grade Level: 11-12**

This course provides the students with a beginning and advanced series of lectures, demonstrations, and practice exercises in the study of prints. Safety will be emphasized as an integral part of this course.

Miscellaneous**Driver & Traffic Safety Education (905952)****Credit: 1****Grade Level: 10-12****Prerequisite: *Valid KY permit or license***

This course provides students with experiences which enable them to make the decisions necessary to move safely and efficiently within vehicle traffic situations. Through a sequence of classroom and supported driving experiences, students are introduced to the driving skills they need to safely operate a motor vehicle.

Physical Education/Health**Health Education (340133)****Credit: .5****Grade Level: 9**

Health addresses the topics of mental health, drugs, alcohol and tobacco, sex education, sexually transmitted diseases, infectious diseases, safety and first aid, cardiopulmonary resuscitation (CPR), nutrition, consumer health and non-infectious diseases. A health course is required for graduation.

Physical Education I (340216)**Credit: .5****Grade Level: 9**

This course is a basic secondary physical education course in which a variety of activities are introduced which stress the development of basic skills, individuals and dual sports, team and lifetime sports, self-testing, cardiovascular training, fitness related activities, and exercise which promote the importance of physical fitness through movement. This course is required for graduation, unless the student has JROTC LET 1.

Adaptive PE Peer Tutor 1 (906010A)**Credit: 1****Grade Level: 10-12****Prerequisite: *Application/Instructor permission***

Students in this course will participate in health and physical education activities and teaching. Students will have the opportunity for certification in First Aid and Cardiopulmonary Resuscitation. Students will serve as peer teachers for students with disabilities, focusing on developing gross

motor skills, strength of the large muscle groups, personal fitness, and positive social interaction. Students interested in becoming teachers, physical therapists, or occupational therapists are recommended for this class.

Advanced Physical Education (340219)

Credit: 1

Grade Level: 10-12

This course is designed to be an extension of Physical Education I to provide students with the advanced skills, knowledge, attitude and confidence to be active for a lifetime.

Fitness Conditioning (340214)

Credit: 1

Grade Level: 11-12

This course emphasizes conditioning activities that help develop muscular strength, muscular endurance, flexibility and cardiorespiratory endurance.

Aerobics/Weight Training (340215)

Credit: 1

Grade Level: 12

This course is designed to offer the students a wide variety of cardiorespiratory fitness activities in order to enhance cardiorespiratory endurance.

Science

Integrated Science (303091)

Credit: 1

Grade Level: 9

Integrated Science is a year-long, NGSS-aligned course that builds scientific literacy through hands-on investigation and problem-solving. Students begin with lab safety, experimental design, measurement, and metric conversions to develop accuracy and confidence in scientific practices. They then explore key concepts in ecology-including energy flow, population dynamics, biodiversity, and human impacts-using data analysis and modeling. The course also examines Earth and Space Sciences, focusing on Earth's systems, geologic processes, natural hazards, climate, and the broader universe. Throughout the year, students apply science and engineering practices, collaborate with peers, and use evidence-based reasoning to understand and explain real-world phenomena.

Intro to Biology (302698)

Credit: 1

Grade Level: 10

Intro to Biology offers students exploratory experiences in the fundamental core concepts of life science. Appropriate laboratory experiences, including an extensive use of various types of microscopes, will be provided to enhance student understanding. Students will not dissect specimens in this class. Topics studied will include basic cell biology, applications in genetics

focusing on adaptations and change over time, and observation of biological phenomena that are difficult to study in the laboratory, and organization in living systems. This class is for students who do not plan to seek a college major in science or medicine. This class meets the life science requirement for graduation.

Accelerated Biology I (302601P)

Credit: 1

Grade Level: 10

Prerequisite: *Teacher recommendation*

This course sparks student motivation and critical thinking about our living world as they engage in real-world data analysis and problem-solving. The Accelerated Biology course emphasizes the integration of content with science practices--powerful reasoning tools that support students in analyzing the natural world around them. Having this ability is one of the hallmarks of scientific literacy and is critical for numerous college and career endeavors in science and the social sciences. The Accelerated Biology areas of focus are: emphasis on analytical reading and writing, strategic use of mathematics, and attention to modeling. This course would be beneficial to any student planning on taking an AP or Dual Credit science course in the future.

Chemistry (304521)

Credit: 1

Grade Level: 11-12, 9 (when paired with permission and paired with Acc. Geometry)

Chemistry is the study of the structure, composition, and behavior of matter. The curriculum emphasizes the investigation of matter, its properties, and reactions. Students will perform various labs and cooperative activities to investigate matter and its properties. Students will use word processing, spreadsheets, and computer applications. Interactive explorations will also be used to study chemical phenomena. A scientific calculator is required.

Physics (304821)

Credit: 1

Grade Level: 11-12

Prerequisites: *Geometry and Algebra 2*

This course will cover measurement, vectors, kinematics, statics, dynamics, momentum, work, power, energy, thermodynamics, and heat. The course will help students to appreciate the world around them, enabling them to obtain information from the world by direct measurement and, by applying the Laws of Nature (Physics), allow them to perform experiments and draw independent conclusions consistent with their physical environment. This course is designed to help the students think and analyze problems in the real world.

CHEM 105: Advanced Chemistry w/Lab (Dual Credit through WKU)**Credit: 1****Grade Level: 11-12, 10 (with instructor permission)****Prerequisites: *Algebra 2 or concurrent enrollment***

In this course, inquiry-oriented laboratory experiences provide opportunities for research-type investigations and development of experimental techniques. Topics of study include, but are not limited to, reaction stoichiometry, molecular geometry, properties and theories of gasses, acids, bases and salts, chemical equilibrium, oxidation-reduction, VSEPR and properties of solutions. This course will satisfy the college chemistry requirement for any non-chemistry major. Education majors, Agriculture majors, Health and Nursing majors, and some others.

ICP (303091)**Credit: 1****Grade Level: 10**

This course serves as an introduction which integrates the basic concepts of chemistry and physics. Students learn how the physical and chemical properties of matter can be explained and predicted in terms of atomic and molecular structures and forces. They also learn how balanced and unbalanced forces influence the behavior of objects. This course provides the basic foundation for further study of chemistry or physics at a greater level of complexity than would be provided by an introductory physical science course.

Forensics (302616)**Credit: 1****Grade Level: 11-12**

This course offers extensive laboratory experience that integrates the concepts learned in biology, chemistry and physics to strengthen individual skills in scientific reasoning and observation. Using inquiry based settings, students will learn basic scientific and mathematical methods and models required in forensic science. Representative skills are: the determination of the force and motion of a vehicular crash, or the logical sequence of events determined through blood spatter analysis. The course also includes examination of physical evidence, correct crime scene protection and investigation, forensic entomology, and forensic anthropology. This course is an elective credit and does not count toward the high school science graduation requirements.

Medical Science (302618)**Credit: 1****Grade Level: 11-12**

This course uses health occupations as a vehicle to present some components of the life science content outlined in the Kentucky Academic Standards for Science. The course is interdisciplinary in nature and integrates the disciplines of life science, mathematics, health, social studies, language arts, arts and humanities, and career studies. During their study of medical science, students will gain an understanding of the normal structure and function of the human body

through scientific investigation. Anatomy, physiology, physics, and chemistry concepts are reinforced with real-life analogies and health-related examples are used to illustrate potentially difficult scientific concepts.

CHEM 107: Advanced Biochemistry w/Lab (Dual Credit through WKU)

Credit: 1

Grade Level: 11-12

Prerequisites: *Algebra 2 or concurrent enrollment*

This course is the second half of a one-year course designed primarily for agriculture and consumer and family science majors, and for non-science majors desiring a full year sequence in chemistry. It does NOT count toward a major or minor in chemistry. Students will become familiar with basic principles of acids and bases, nuclear, organic, and biochemistry. The course focuses on providing insights into pH, nuclear chemistry, basic organic principles (including nomenclature, structure and reaction), chemistry of proteins, lipids, and carbohydrates and practical application of these chemistry topics in agriculture, dietetics and everyday life.

Social Studies

Integrated Social Studies (459801)

Credit: 1

Grade Level: 9

This class includes the study of government, economics, and geography. Students learn what it means to become good citizens, and it includes a study of significant documents in American Government. Students will study the structure of the US political process and parties, elections, and forces such as mass media, public opinion, and propaganda. Students will explore and examine economic systems, forces that influence economic growth, and the impacts of limited resources on different people and nations. Students will also broaden their view of the world and increase their multicultural perspective of people through studying the major themes of geography, cultures, governments, religions, resources, etc.

AP Human Geography (450712)

Credit: 2

Grade Level: 9-12

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio economic organization and its environmental consequences. Students will also learn about the methods and tools geographers use in their research and applications. Students will be required to read frequently, and there is a heavy focus on understanding key concepts and providing/recognizing examples of those concepts. *This is a year-long course.*

World History (450835)**Credit: 1****Grade Level: 10**

Following a brief review of civilization before 1400, this class will focus mainly on the world since 1400. This course will include the study of struggles and changes both within and between world cultures as well as progress throughout the past five centuries. This is a required course, but students may take Advanced Placement World History to fulfill the requirement.

AP World History (450876)**Credit: 1****Grade Level: 10-12**

Advanced Placement World History is a survey of the history of the world focusing on cultural and political aspects; ancient and modern history; the study of western and non-western civilizations, and current events.

United States History (450812)**Credit: 1****Grade Level: 11**

US History is a survey course covering 1877 through the present. It is required for graduation, but students may take HIS 109 instead. This course is designed to encourage students to explore, study, and examine their nation's past. It will help students develop an appreciation for the past and understand the importance of their role in the nation's present and future.

Sociology (451121)**Credit: 1****Grade Level: 9-12**

In this elective course, students will study human society and the behavior of humans in group situations. Topics include such things as the basic unit and institutions of social life, social relationships, social order, and social change.

American Government (451004)**Credit: 1****Grade Level: 11-12**

American Government is the study of the United States, local, and other political systems; recruitment; roles and decision making; official duties; executive, legislative, and judicial government branches.

Historical and Cultural Influence of the Bible: The New Testament (459812) Credit: 1

Grade Level: 9-12

This elective course focuses on the historical impact and literary style from texts of the New Testament era. Topics may include historical background and events of the period, the customs and cultures of the peoples and societies, and the influence of the texts on law, history, government, literature, art, music, customs, morals, values, culture and events, including recent and current events.

Historical and Cultural Influence of the Bible: The Old Testament (459811) Credit: 1

Grade Level: 9-12

This elective course focuses on the historical impact and literary style from texts of the Old Testament era. Topics may include historical background and events of the period, the customs and cultures of the peoples and societies, and the influence of the texts on law, history, government, literature, art, music, customs, morals, values, culture and events, including recent and current events.

AP Psychology (459902) Credit: 1

Grade Level: 9-12

The goal of this course is to increase the understanding of psychology, its methods, theory and research, with the objective that each student pass the Advanced Placement Examination in order to earn college credit. The course will explore the psychological facts, principles and phenomena associated with each of the major subfields of psychology. The course is broken into different units, which reflect a division of the major areas of psychology that are taught at the college level. The knowledge gained of psychology inquiry will provide perceptions of the world around us, insights into one's own and other's behaviors, and an appreciation of the complexity of human behavior.

Engineering

Engineering I (210221) Credit: 1

Grade Level: 9-10

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. Students will work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

Engineering II (210222)**Credit: 1****Grade Level: 10-11**

Through problems that engage and challenge, students explore a broad range of engineering topics including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

Civil Engineering (210223)**Credit: 1****Grade Level: 11-12**

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software.

Electrical/Electronics Engineering (210232)**Credit: 1****Grade Level: 11-12**

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

In this course, students will gain skills and knowledge through classroom and lab activities in the areas of basic DC and AC circuits, circuit components, codes, testing, electromagnetism and inductance, capacitance, power supplies, power generation and distribution, amplification, digital circuits, and computer fundamentals. Students will develop a basic understanding of the various types of energy and how energy is obtained. Students will learn the safe use of the tools, test instruments, equipment and supplies used in this course plus information on career opportunities in this field. Hands-on and problem solving activities will expose students to areas of electron theory, Ohm's Law, insulators, conductors, electronic components, oscillators, and electronic fabrication.

Engineering Capstone (210110)**Credit: 1****Grade Level: 12**

The knowledge and skills students acquire through PLTW Engineering come together in Engineering and Design Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

Visual and Performing Arts

Visual Arts - Fundamentals of Art & Design (500710)

Credit: 1

Grade Level: 9-12

This course introduces students to the basic fundamentals of artistic expression. The basic level 1 course includes experiences in drawing, painting, two and three-dimensional design, sculpture, and other art forms. The course emphasizes observations, interpretations of the visual environment, visual communication, imagination and symbolism, and an introduction to various visual arts techniques and media. The focus of the course is on the application of the fundamental processes of artistic expression and the application of the concepts and approaches in the symbolic aspects of art and design to two- and three-dimensional problems so that they demonstrate a range of abilities and versatility with technique, problem-solving, and ideation. The students will also study historical and contemporary art and artists from a worldwide perspective, and receive instruction and practice in peer review through the critique process, presentation, responding to art, and connecting their art to the world around them.

Comprehensive Visual Arts (500711)

Credit: 1

Grade Level: 9-12

Prerequisite: *Fundamentals of Art and Design*

Students will explore an art form, obtaining knowledge in that form to plan and create individual works of art based on such knowledge while following and breaking from traditional conventions. Students will examine the language, materials, media, and processes of that particular art form and the fundamental processes of artistic expression supporting a work. Advanced level 2 instruction encourages students to develop their own artistic styles. Although Comprehensive Visual Arts focuses on creation, the study and analysis of major artists, art movements, and styles is included. In completing this course, students consider various techniques, methods, venues, and criteria for analyzing and selecting their art for preservation and presentation, including evolving technologies when preparing and refining artwork for display.

Visual Art Drawing/Painting (500712)

Credit: 1

Grade Level: 11-12

Prerequisites: *Comprehensive Visual Art*

In this advanced course, level 3 and 4 visual art students will explore drawing issues including line quality, light, and shade, rendering of form, composition, surface manipulation, and the illusion of depth and mark-making through a variety of means, such as painting, printmaking, or mixed media.

Art Portfolio A (500714A)**Credit: 1****Grade Level: 11-12, 10 with teacher recommendation for GSA/BETA/GT students****Prerequisite: *Drawing & Painting or teacher recommendation***

Art Portfolio A is designed to address a variety of factors and methods including evolving technologies when preparing and refining artwork for portfolio presentation and/or when deciding if and how to preserve and protect art. Level 3 students will create, select, respond to, and present work that clearly reflects newly obtained technical skills, increasing conceptual thinking, and is a reflection of their personal interests and may serve as an opportunity for students to expand their expertise in a particular form or style, to explore a topic in greater detail, or to develop more advanced skills. Individual critique and planned peer review will help students prepare for future endeavors. This course provides advanced instruction, preparing students to take one of several offerings in the studio art pre-AP courses, apply to GSA or compete in BETA arts competitions. Identified GT students may also take this course.

Art Portfolio B (500714B)**Credit: 1****Grade Level: 12****Prerequisite: *Art Portfolio A or two previous art courses***

This course is a continuation of the level 4 skills and topics explored in Art Portfolio A and it is often paired with the AP course as the pre-AP course for one full year of art that will be used in the adjacent AP studio art course. A required 24 high-quality physical artworks are needed for the advanced level AP studio art exam, which is the digital submission of a personal art portfolio.

AP Studio Art: Drawing Portfolio (500716)**Credit: 1****Grade Level: 12****Prerequisite: *Art Portfolio B***

In this course, level 4 and 5 AP students will explore drawing issues including line quality, light and shade, rendering of form, composition, surface manipulation, and the illusion of depth and mark-making through a variety of means, such as painting, printmaking or mixed media. Students will develop technical skills and become familiar with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on an AP exam.

AP Studio Art: 2D Design Portfolio (500722)**Credit: 1****Grade Level: 12****Prerequisite: *Art Portfolio B***

In this course, level 4 and 5 AP students will demonstrate mastery through any two-dimensional medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting and printmaking. Students will develop

technical skills and become familiar with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on an AP exam.

AP Studio Art: 3D Design Portfolio (500723)

Credit: 1

Grade Level: 12

Prerequisite: *Art Portfolio B*

In this course, level 4 and 5 AP students will demonstrate mastery through any three-dimensional approach, such as figurative or non figurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage, and 3D fabric/fiber arts. Students will develop technical skills and become familiar with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. College credit is earned with a qualifying score on the AP exam.

Visual Art Workplace Intern, A or B (500730)

Credit: 1

Grade Level: 12

Prerequisites: *Portfolio A or 3 previous art courses, and/or teacher & community workplace pre-approval*

In this course, students volunteer with local community art organizations. On and off campus worksites can be obtained by student inquiry. Worksite approval must be given by the teacher. Advanced students must be in good standing and have their own transportation when needed. Limited placement is available. References are required.

Introduction to the Theatre (500511)

Credit: 1

Grade Level: 9-12

Introduction to the Theatre provides an overview of skills of acting on stage. Students will study and demonstrate the various techniques used by an actor on stage. These include but are not limited to: improvisation, pantomime, vocal delivery, and physical delivery. Students will also prepare and perform a monologue and dialogue during this course to demonstrate the skills learned.

Theatre 2: Design/Tech (500512)**Credit: 1****Grade Level: 10-12****Prerequisite: *Introduction to the Theatre***

Students will learn the basics of the technical side of theatre. Students will study and demonstrate the basic techniques and will be shown professional demonstrations of set design, costume design, stage makeup, lighting, and sound used in the theatre. Students will help demonstrate these skills as they work on these elements for the high school productions as well as focusing these skills on a specific script of their choice.

Dance (500533)**Credit: 1****Grade Level: 9-12**

In this class, students will experience various styles of dance. They will learn basic steps of the different styles commonly used in musical theater. All levels of dance ability are welcome to participate in this class and class will be geared to those abilities. Students will be expected to learn and perform all the styles taught in this class which include but are not limited to: ballet, tap, jazz, and ballroom.

Chorus (500925)**Credit: 1****Grade Level: 9-12**

This course is open to any student who likes to sing. Singers learn some of the tools for reading music, and they rehearse music from various styles and historical periods. There are usually two annual concerts performed by this group in which attendance of these concerts is mandatory. Singers also have opportunities for participating in district choral events, and in the Kentucky All-State Chorus (audition required).

Concert/Marching Band (500913)**Credit: 1****Grade Level: 9-12****Prerequisite: *Participation in middle school program or course pass from the Director of Bands***

This course is designed to promote students' playing technique for brass, woodwind, and percussion instruments, and cover a variety of music styles primarily for concert performances. Students will be asked to perform in concerts, parades, marching band, and pep band. Some rehearsals may be after school or at night.

Music Theory (500928)**Credit: 1****Grade Level: 10-12****Prerequisite:** *Band/Chorus experience or private music lessons*

Music Theory provides students with an understanding of the fundamentals of music and includes the following topics: melody, harmony, composition, arrangement, analysis, aural development, and sight reading. (Only offered in the spring of odd years: 2025, 2027, 2029, etc.)

Music Appreciation (500911)**Credit: 1****Grade Level: 9-12**

Music appreciation is an introductory course of the elements of music and how they develop and change throughout history. This course will fulfill the humanities graduation requirement. (Only offered in the spring of even years: 2026, 2028, 2030, etc.)

MUS 100: Music Appreciation (Dual Credit through MCC)**Credit: 1****Grade Level: 11-12, 10 with instructor permission****Prerequisite:** *ACT Reading score of 20*

This is an introductory college music course which presents main elements of music, how they develop and change throughout history, and the role of music in society.

World Languages**Spanish 1 (161108)****Credit: 1****Grade Level: 9-12**

This introductory course uses stories, conversations, and real-world situations to help students understand and communicate in Spanish from day one. Vocabulary and grammar are acquired naturally through listening, reading, and interaction in meaningful contexts. Students will develop basic speaking, listening, reading, and writing skills while gaining insight into the cultures of the Spanish-speaking world.

Spanish 2 (161109)**Credit:1****Grade Level: 9-12****Prerequisite:** *Spanish 1*

This course builds on the foundation of Spanish 1 by expanding vocabulary, grammar, and cultural knowledge through comprehensible input. Students continue to develop listening, speaking, reading, and writing skills in meaningful contexts, focusing on communicating with greater detail, confidence, and accuracy. In addition, students will begin learning key grammar concepts and will read a couple of beginner-level Spanish novels to strengthen comprehension and build cultural connections.

Spanish 3 (161110)**Credit: 1****Grade Level: 11-12****Prerequisite: *Spanish 2***

In Spanish 3, students will strengthen their communication skills while preparing for advanced study. The course continues using comprehensible input through stories, conversations, and authentic resources, while placing a greater emphasis on grammar concepts needed for college-level Spanish. Students will also read and analyze Spanish-language novels, deepening both their cultural understanding and their ability to interpret and discuss more complex texts.

German 1 (160508)**Credit: 1****Grade Level: 9-12**

This course introduces listening, speaking, reading and writing language skills within a cultural context.

German 2 (160509)**Credit: 1****Grade Level: 9-12****Prerequisite: *German 1***

The four basic skills of reading, speaking, listening, and writing in German will be developed further and on a higher level. Recordings will be utilized to emphasize native pronunciation; communication in German will increase. Oral German in the classroom is encouraged. Study of culture, geography, and history of German-speaking countries will also continue.

German 3 (160510)**Credit: 1****Grade Level: 11-12****Prerequisite: *German 2***

The four basic skills of reading, speaking, listening, and writing in German will be developed further on a higher level. Recordings will be utilized to emphasize native pronunciation, communication in German will increase. Oral German in the classroom is encouraged. Study of culture, geography, and history of German-speaking countries will also continue.

German 4 (160511)**Credit: 1****Grade Level: 12****Prerequisite: *German 3***

The four basic skills of reading, speaking, listening, and writing in German will be developed further on a higher level. Recordings will be utilized to emphasize native pronunciation; communication in German will increase. Oral German in the classroom is encouraged. Study of culture, geography, and history of German-speaking countries will also continue.