

MADISONVILLE NORTH HOPKINS HIGH SCHOOL

CLASSES of 2023 and 2024

Principal: Adam Harris
Assistant Principals: Brent Gibson and Jennifer Hall

Guidance Counselors for 21-22 Year
Candius Vandiver- 12th Grade
Suzanne Duncan- 9th and 10th Grades
Jeannie Morris- 9th and 11th Grades

Madisonville North Hopkins High School, accredited by the Southern Association of Colleges and Schools, holds a comprehensive state rating from the Kentucky Department of Education and membership in the College Entrance Examination Board. The school offers approximately 150 individual course choices. All courses comply with the Kentucky Department of Education regulations.

All classes at Madisonville North Hopkins High School are open to both boys and girls. Programs do not, on the basis of race, color, national origin, sex or handicap, exclude persons from participating in, deny persons the benefit of, or subject persons to discrimination in, any educational instruction or activity.

NONDISCRIMINATION POLICY STATEMENT

The Hopkins County Board of Education does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, or marital status in providing educational opportunities, activities, or employment practices in accordance with Title VI of the Civil Rights Act of 1964, Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 (revised 1992), and The Americans with Disabilities Act of 1990 and provide, upon request by qualified disabled individuals, reasonable accommodations including auxiliary aids and services necessary to afford individuals with a disability an equal opportunity to participate.

This Career Pathways & Course Descriptions Book represents the current policies and curriculum guidelines passed by the Madisonville North Hopkins High School Site Based Decision Making Council and are subject to change at any time by the council.

MADISONVILLE NORTH HOPKINS HIGH SCHOOL MISSION STATEMENT

The MNHHS community accepts the responsibility to achieve academic success in a safe, caring, supportive environment. Our focus is to inspire our students and influence their choices, so they may positively impact our world for a lifetime.

KENTUCKY GRADUATION REQUIREMENTS

Graduation Qualifiers

Students entering high school in the **2019-20** school year **must** complete **one** of eight Graduation Qualifiers:

1. Precollege curriculum as established by the Council on Postsecondary Education
2. Benchmark score in one section of a college admissions or placement examination as established by the Council on Postsecondary Education
3. Three postsecondary credit hours or more of a Kentucky Department of Education approved dual credit course with a grade of C or higher
4. One course and corresponding assessment meeting the following criteria: Advanced placement (AP) with a score of three or higher; or Cambridge Advanced International (CAI) with a score at or above benchmark; or International baccalaureate (IB) with a score of five or higher;
5. Industry certification as approved by the Kentucky Workforce Innovation Board
6. Four credits from valid courses within a single KDE-approved career pathway
7. Complete 2 years of a KDE approved or Kentucky Labor Cabinet approved pre-apprenticeship or apprenticeship
8. A Kentucky Department of Education approved process to verify 500 hours of exceptional work experience, or alternative requirements as prescribed in a student's IEP.

22 Personalized Credits

Students entering high school in the **2019-20** school year must complete the following 22 personalized credits before graduation.

- English I and II AND 2 additional English credits aligned with the ILP
- Algebra I and Geometry AND 2 additional Math credits aligned with the ILP
- 3 credits Social Studies (at least 1 aligned with ILP)
- 3 credits Science (at least 1 aligned with ILP)
- 1/2 credit Health and ½ credit Physical Education
- 1 credit Visual and Performing Arts
- 6 additional credits aligned with ILP

Graduation Prerequisites

Students entering high school in the **2020-21 school year** must demonstrate basic competency in reading and math in one of three ways before graduation.

1. The student's 10th grade state-required assessments meeting the minimum criteria in reading and mathematics; **OR**
 - The minimum criteria shall include earning a KDE-approved scale score in the apprentice student performance level of the state-required assessments approved by the Kentucky Board of Education as passing.
 - Students who do not meet the minimum criteria on one or both assessments may retake the reading and/or mathematics assessments twice annually in the 11th and 12th grades of high school enrollment.
 - The student's first completion of the assessments in 10th grade shall contribute to the school's accountability rating;
2. The student's 8th grade state-required assessment rating of proficient or higher for reading or mathematics or both reading and mathematics, if applicable; **OR**
3. A student collection of evidence to include the following:
 - The student's ILP that includes student transcript;
 - If applicable, the student's IEP, that includes evidence that the student has received specially designed instruction and related services in reading and mathematics;
 - Performance on the required state assessments;
 - Appropriate interventions, targeted to the student's needs, provided to the student to ensure support was provided toward meeting the requirements outlined in this administrative regulation;
 - Student work demonstrating the students' competency in reading and/or mathematics, as applicable; and f. The student's postsecondary plans.
 - The process shall require the principal to submit the collection of student evidence to the superintendent or designee for review and approval.

Additional Requirements

- Pass a 100 question civics exam
- Receive instruction in financial literacy
- Demonstrate competency in essential skills and technology

KENTUCKY PRE COLLEGE CURRICULUM

The Kentucky Council on Postsecondary Education is responsible for setting the minimum pre-college requirements for admission to Kentucky's public universities. Students who will enter one of the universities will be required to have completed high school, the Pre-College Curriculum, and the ACT or SAT examination. Students entering community colleges or technical schools must meet the pre-college curriculum, meet certain score requirements to enter into programs, or take developmental courses to meet requirements.

PRE COLLEGE CURRICULUM COURSE REQUIREMENTS

English	4 units	English 1, English 2, English 3, English 4
Mathematics	3 units	Algebra 1, Geometry, Algebra 2
Science	3 units	Life Science, Chemistry/ESS and Physics/ESS
Social Studies	3 units	Civics/Geography, World History, and U.S. History
Health/PE	1 credit	Health, PE
Fine Arts	1 credit	History & Appreciation of Arts Survey, Band, Chorus
Foreign Language (Nonnative)	2 credits	Spanish
Electives	5 credits	(3 rigorous) Computer Literacy Course (Digital Literacy) strongly recommended; 4 of these electives must be part of the career pathway

CORE SUBJECT REQUIREMENTS for ALL STUDENTS

Below is the suggested placement of the core subject requirements.
Courses may be moved to another year with approval from the counselor.

Subject/Grade	9th Grade	10th Grade	11th Grade	12th Grade
ENGLISH	English 1 or Pre AP English 1	English 2 or Pre AP English 2	English 3 , AP English Language, or Dual Credit ENG 101	English 4, AP English Literature, or Dual Credit ENG 102
MATH				
Option 1	Algebra 1	Geometry	Algebra 2	^4 th Year Math
Option 2	Pre-AP Algebra and Pre AP Geometry	Pre-AP Algebra 2	Pre AP Pre-Calculus	AP Calculus or AP Statistics
Option 3	Integrated Math 1	Integrated Math 2	Algebra 1 CS or Integrated Math 3	Algebra 2 CS or Integrated Math 4
SCIENCE				
Option 1#	Biology or Pre AP Biology	Chemistry or Pre AP Chemistry	Physics or AP Physics	
Option 2	Biology	Physical Science	Earth Space Science	
SOCIAL STUDIES	Geography and Civics or Pre AP Geography and Pre AP Civics	World History or AP World History	US History or AP US History	
OTHER	Health/PE Digital Literacy A, B	*Fine Arts (alternate classes below, completed in grades 9-12)		
ELECTIVES	Career pathway elective credits	Career pathway elective credits	Career pathway elective credits	Career pathway elective credits

^ 4th Math requirement options include Agriculture Math, Pre-Calculus, Statistics, or Algebra 3.

Option 1 for science meets the Pre-College Curriculum requirements.

*One credit in any Art, Band, or Choir class or History and Appreciation of Arts Survey will fulfill this requirement. Floriculture, which is offered through the agriculture department, also meets this requirement.

The Pre-College Curriculum also requires two years of the same world language.

MNHHS REQUIREMENTS FOR HIGH SCHOOL GRADUATION

COURSE	CREDITS
English	4
Math	4
Science	3
Social Studies	3
Fine Arts	1
Health	½
Physical Education	½
Career Pathway Requirements	4
Electives (Academic and Career Interest standards based learning experiences)	Varies Per Course
TOTAL CREDITS	27

GRADE LEVEL CREDIT REQUIREMENTS

Sophomore 6 credits	Junior 13 credits	Senior 19.5 credits	To Graduate 27 credits
4 credits must be English 1, Math, Biology, Geography, and Civics	4 credits must be English 2, Math, Chemistry or Physical Science, and World History	4 credits must be English 3, Math, Physics or Earth Space Science, and US History	Complete 12 trimesters Earn credits in English 4 and 4 th year of Math

NOTE: Students who transfer to MNHHS will be exempt from the core content requirements to move onto the next grade level, but they will have to meet the total credit requirements for appropriate grade level placement.

GRADING SYSTEM (AP GRADES ARE WEIGHTED)

A=90-100	A=4.0	A=5.0
B=80-89	B=3.0	B=4.0
C=70-79	C=2.0	C=3.0
D=60-69	D=1.0	D=2.0
F=Below 60	F=0	F=0

TRIMESTER SCHEDULING

The 3 X 6 trimester schedule is a 6-period day. For each class, students will receive a progress report followed by a 12 week report card. They will earn either one-half credit for each class passed at the 12 week mark or one credit for full-year courses. There are three trimesters in a school year. Each year, students meet with their counselors to choose classes for the upcoming school year. Counselors will preselect students' required classes based on their test scores. Each student will then choose electives giving them a total of eighteen 12-week courses for the year. Courses vary as to how many trimesters students are required to be in the class.

SCHEDULING INFORMATION

The following information will assist you in completing your schedule for next year. **Please give careful thought to your selection of courses.**

- You and your parents are responsible for choosing courses designed to meet graduation requirements. If you do not complete a schedule by the deadline, your counselor will complete one for you. This eliminates the opportunity for you to choose your own classes, and therefore prevents you from changing the schedule made out for you.
- All underclassmen are required to take English, Math, Science, and Social Studies each year.
- If you fail a required course in the first or second trimester with less than a 50% average, your counselor may change your schedule to repeat that course in the next trimester. If you fail a core course in the third trimester, you must have at least a 50% average to make up that course in ESS Summer School; otherwise you will have to wait until next year to retake the course. This could affect your class standing and graduation year.
- **Remember that you are choosing classes for the whole year, so please select carefully. Requests to change your schedule may not be honored after a trimester begins.**
- While certain courses are required, there are many elective courses from which to choose. The choice of courses should be based on the career pathway selected as well as career goals, interests, and prior grades.
- **Courses must be chosen from those listed for the grade in which the student is enrolled.**
- Each student must select 18 courses per year. Combinations of 1-, 2- or 3-trimester courses will be selected to meet this total.
- Band and any 3 trimester AP classes **must** be taken all 3 trimesters. Please read the course selection guide carefully and see your counselor if you have any questions.

SCHEDULE CHANGES

A student may not drop classes without the permission of a parent/guardian and guidance counselor. Students who desire a schedule change must pick up a schedule change request form from the guidance office. All schedule change requests (for year-long and 1st trimester courses) must be submitted to the counselor five days after the start of school. After that time, changes will be made by the counselor for the following reasons only:

- Inappropriate academic placement
- Improper grade level placement
- Course completed in summer school
- Placement in a credit recovery class
- At the discretion of the principal or counselor

AUTOMATIC PLACEMENT IN AP/PRE-AP COURSES

Students who have a qualifying ACT, PSAT, MAP, or CERT score may be automatically placed in AP and/or Pre-AP courses. Teacher recommendations are also considered. Parents of students meeting the criteria who wish to have their child enrolled in a core course other than AP or Pre-AP must submit a Request to Enroll in a core course other than AP/Pre-AP form. Teacher recommendations for pre AP and AP courses are also considered in this decision.

ENGLISH

COURSE	Fall English/Reading CERT Score	ACT Score
Pre AP English 1	19 or higher	23 or higher
Pre AP English 2	21 or higher	24 or higher
AP English Language	24 or higher	24 or higher, qualifying PSAT score
AP English Literature	26 or higher	26 or higher, qualifying PSAT score

MATH

Students and Parents must sign an AP Math Agreement Form. By choosing Pre-AP Geometry, as a freshman, students MUST follow the Pre-AP/AP Math Curriculum.

COURSE	Fall Math/Science CERT Score	ACT Score
Pre AP Algebra 1 and Pre AP Geometry A, B	19 or higher	

SOCIAL STUDIES

COURSE	Fall English/Reading CERT Score	ACT Score
Pre AP Civics and Geography	20 or higher	23 or higher
AP World History	22 or higher	24 or higher
AP US History	24 or higher	26 or higher

SCIENCE

COURSE	Fall Math/Science CERT Score	ACT Score
Pre AP Life Science/Biology	20 or higher	23 or higher
Pre AP Chemistry	22 or higher	25 or higher
AP Physics	23 or higher	24 or higher

PETITION FOR CONSIDERATION FOR PLACEMENT IN AP AND/OR PRE-AP COURSES

Parents of students who do not meet the automatic enrollment criteria may request for student placement in Pre-AP and/or AP courses. Parents should complete the Petition for Consideration Form and return it to the guidance office. Parents of students wanting to drop to a lower level than AP or Pre-AP should complete the Petition for Consideration Form and return it to the guidance office.

WHAT IS AP?

Advanced Placement Program (AP) enables students to pursue college-level studies , with the opportunity to earn college credit, advanced placement or both , while still in high school. AP Exams are given each year in May. A score of 3 or higher on an AP Exam can typically earn students college credit and/or placement into advanced courses in college.

AP COURSES OFFERED AT MNHHS

English: AP English Language, AP English Literature

Math: AP Calculus, AP Statistics

Science: AP Biology, AP Chemistry, AP Environmental Science, AP Physics

Social Studies: AP Human Geography, AP Psychology, AP US Government, AP US History,
AP World History

Spanish: AP Spanish Language, AP Spanish Literature

DUAL CREDIT

Dual credit courses are ones where junior and senior students earn high school and college credit simultaneously. Guidelines for dual credit include a student must enroll as a KCTCS student in the course in which they wish to receive credit. Current tuition is roughly 1/3 of the cost of regular tuition. Currently, unless a student is participating in either the KCTCS Junior Scholarship or the KY Dual Credit Scholarship for senior students, they must pay tuition (roughly 1/3 of the cost of regular tuition.) Additional information regarding Dual Credit can be obtained by contacting Janet Railey at MCC (270-824-8576).

Dual credit courses offered at MNHHS include: ENG 101, ENG 102, MAT 150, SPA 101, and SPA 102.

Dual credit courses offered at MCC during the school day include ones in agriculture, aviation, machine tool, mining, and welding. These courses are only available for seniors.

SENIOR EARLY COLLEGE ACADEMY (MCC)

In partnership with Madisonville Community College, 12th grade students have the opportunity to begin college while still enrolled in high school. Students enrolled in this program will be able to both earn high school and college credit. Minimum requirements for admission include: high school GPA of 3.0 and ACT benchmark scores of English- 18, Math- 22, and Reading-20.

KENTUCKY EDUCATIONAL EXCELLENCE SCHOLARSHIP (KEES)

Every year that students attend a certified Kentucky high school and earn at least a 2.5 GPA, a KEES award ranging from \$125 (for a 2.5 GPA) to \$500 (for a 4.0 GPA) is earned. If a student earned a 4.0 GPA during all four years of high school, he/she will have earned \$2,000 for college in Kentucky. This amount is renewable each academic year of college if a student earns a 2.5 GPA. Students may also earn bonus money ranging from \$36 (for a 15 on the ACT or 710 on the SAT) to \$500 (for an ACT of 28 or higher or SAT of 1240 or higher). For more information, please visit www.kheaa.com.

GOVERNOR'S SCHOOL FOR THE ARTS

The Governor's School for the Arts (GSA) is a program created to provide intense development in the arts area of the participant's choice. GSA is a summer residential program held for three weeks on the University of Transylvania campus in Lexington, Kentucky. During the three weeks over 200 of participants are guided by a faculty of professional artists/educators in nine different arts disciplines: Architecture, Creative Writing, Dance, Drama, Musical Theatre, Instrumental Music, New Media, Visual Art, and Vocal Music. Grade point average is not a factor in the selection/audition process, and **the program is open to all Kentucky sophomores and juniors**. For additional information, go to <http://www.kentuckygsa.org/>.

GOVERNOR'S SCHOLAR PROGRAM

The Governor's Scholar Program is a challenging five-week residential program at a Kentucky college for outstanding Kentucky students completing their **junior year in high school**. Students must apply and be selected by the district selection committee to be considered for admission. They attend free of charge and are responsible for personal expenses only. There are no grades or credits given through participation in the program. To be considered for the program, students must complete and submit the Student Nomination Packet to their guidance counselor. For more information regarding the Governor's Scholars Program, please go to <http://gsp.ky.gov/>.

GOVERNOR'S SCHOOL FOR ENTREPRENEURS

The Governor's School for Entrepreneurs is an accelerator-style program where creative, free-thinking teens develop their ideas for innovative products and services in an exploratory learning environment. Students in 9th, 10th and 11th grades may apply with a product or service idea, or to be a team member working on someone else's idea. For additional information, visit <https://www.kentuckygse.com/>.

MURRAY STATE UNIVERSITY COMMONWEALTH HONORS ACADEMY

The Commonwealth Honors Academy is an academic enrichment program for outstanding high school students who have completed their junior year. Upon completion of CHA, students will receive six hours of university credit, have the opportunity to take six additional hours of *tuition-free university courses at Murray State University during their senior year, and be awarded a four-year, \$2,000-per-year housing scholarship to attend Murray State University. All students applying for the Commonwealth Honors Academy should have a 3.5 GPA (on a 4-point scale) and 25 Composite ACT (or the equivalent PSAT, SAT or another standardized test score). For additional information, visit <https://www.murraystate.edu/cha/>.

Valedictorian, Salutatorian, Historian, and Top Twenty Policy

Class of 2021 and Following

Valedictorians, salutatorians, historians, and the remaining top twenty honor graduates will be selected using the following points-based system. Only the valedictorian(s), salutatorian(s), and historian(s) will speak at the graduation ceremony.

Valedictorians, salutatorians, historians, and the remaining top twenty honor graduates must also adhere to the following during their high school career:

- **Core AP Courses:** Students must take core AP courses: AP World History, AP English Language, AP US History, AP Physics, AP English Literature, and AP Math (Statistics or Calculus)
- **Good Behavior:** No major disciplinary infractions.
- **Academic Honesty Policy:** Violation disqualifies a candidate.
- **Respectable Attendance:** Must maintain 95% or higher attendance.

No courses taken outside of MNHHS will be considered in valedictorian ranking. (Examples: Kentucky Virtual Schools, Online courses, etc.).

Independent study courses that give a student more credits than the normal amount of credits per year will not be considered in the valedictorian calculation.

All students must take a full schedule each year. A student with any no credit courses will not be considered for valedictorian, salutatorian, and/or historian (can't be a teacher's aide).

These guidelines are set forth for school ceremonial purposes; class rank will continue to be determined on both a weighted and non-weighted basis for college reporting purposes.

Students attending the Gatton Academy, Asbury, etc. will not qualify for valedictorian. These students will be recognized at Awards Night and in the Graduation Program.

Valedictorian, Salutatorian, Historian, and Top Twenty Policy (Continued)

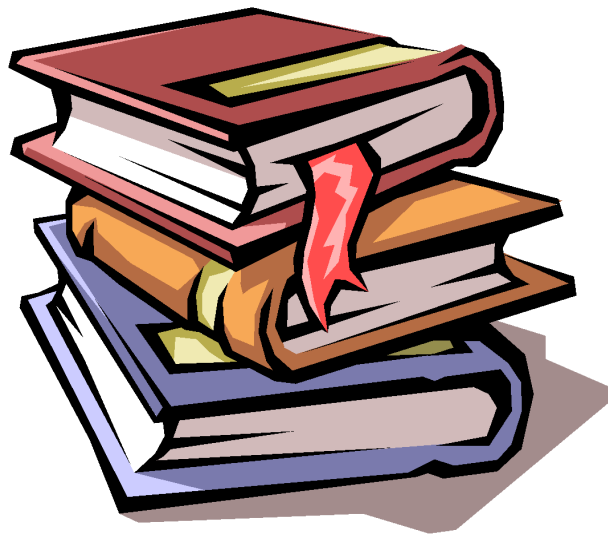
GPA and points awarded, according to weighted scale.

GPA	Points Possible	Points Earned		GPA	Points Possible	Points Earned
4.5	35			3.7-3.8	27	
4.4-4.5	34			3.6-3.7	26	
4.3-4.4	33			3.5-3.6	25	
4.2-4.3	32			3.4-3.5	24	
4.1-4.2	31			3.3-3.4	23	
4.0-4.1	30			3.2-3.3	22	
3.9-4.0	29			3.1-3.2	21	
3.8-3.9	28			3.0-3.1	20	

ACT or SAT Score: Student uses the highest score. The latest ACT or SAT score that will be accepted for consideration must be taken in February of the senior year.

ACT	SAT	Points Possible/Points Earned		ACT	SAT	Points Possible/Points Earned
35-36	1560+	20		29	1260+	14
34	1510+	19		28	1210+	13
33	1460+	18		27	1160+	12
32	1410+	17		26	1110+	11
31	1360+	16				
30	1310+	15				

KDE APPROVED CAREER PATHWAYS



KDE APPROVED CAREER PATHWAYS

Agriculture Pathways

Agribusiness Systems

Agribusiness systems contribute to the production, processing, marketing, distribution, financing and development of agricultural commodities and resources. This includes food, fiber, wood products, natural resources, horticulture and other plant and animal products and services. Agribusiness is a high-tech industry that uses satellite systems, computer databases and spreadsheets, biotechnology and many other innovations to increase efficiency and profitability.

Course Name	Credit	Grade Level
Principles of Agriscience A, B	½ per course	9-10
Agriscience A, B	½ per course	9-10
Ag Employability Skills A	½ credit	11-12
Agriculture Sales	½ credit	11-12
Greenhouse Tech A, B	½ per course	10-12

Agriculture Power/Structure/Technical Systems

The Agricultural Power, Structural, Technical Systems pathway is built on the application of concepts in engineering, hydraulics, pneumatics, electronics, power, structures, and controls to the field of agriculture. Students design agricultural structures, as well as machinery and equipment, while utilizing safe practices of operation and maintenance.

Course Name	Credit	Grade Level
Principles of Agriscience A, B	½ per course	9-10
Agriscience A, B	½ per course	9-10
Ag Construction Skills A, B	½ per course	10-12
Sm Power Equipment A	½ credit	10-12
Ag Maintenance	1 credit	11-12
Ag Employability Skills A	½ credit	11-12
Agriculture Sales	½ credit	11-12

Animal Science Systems

This pathway focuses on the scientific principles that underlie the breeding, care, and management of agricultural animals and the production, processing, and distribution of agricultural animal products. This includes developing better, more efficient ways of producing and processing meat, poultry, eggs and dairy products, as well as studying genetics, nutrition, reproduction, growth and development of animals.

Course Name	Credit	Grade Level
Principles of Agriscience A, B	½ per course	9-10
Agriscience A, B	½ per course	9-10
Animal Science A, B	½ per course	10-12
Veterinary Science A, B	½ per course	10-12
Ag Employability Skills A	½ credit	11-12
Agriculture Sales	½ credit	11-12

Horticulture/Plant Science Systems

This pathway focuses on the scientific principles that underlie the breeding, cultivation, and production of agricultural plants, and the production, processing, and distribution of agricultural plant products. Includes instruction in the plant sciences, crop cultivation and production, and agricultural and food products processing.

Course Name	Credit	Grade Level
Principles of Agriscience A, B	½ per course	9-10
Agriscience A, B	½ per course	9-10
Landscaping	½ credit	10-12
Floriculture/Floral Design	½ credit	10-12
Greenhouse Tech A, B	½ per course	10-12
Ag Employability Skills A	½ credit	11-12
Agriculture Sales	½ credit	11-12

Family and Consumer Science Pathways

Consumer and Family Services

The Consumer and Family Services pathway helps students develop knowledge and skills that span across a broad range of Family and Consumer Sciences content areas and are central to career areas involving human services, consumer services, consumer protection, and advising, education and training as well as social and community services.

Course Name	Credit	Grade Level
Choose 3 credits from the following:		
FACS Essentials A, B	½ per course	9-10
Money Skills A	½ credit	10-12
Middle to Late Lifespan Development A, B	1 credit	10-12
Relationships A	½ credit	11-12
Choose 1 credit from the following:		
Foods and Nutrition A, B	½ per course	10-12

Culinary and Food Services

The Culinary and Food Service Pathway addresses a skill set necessary for success in the culinary industry. The courses in this pathway will help students develop skills in early career ladder positions and promote continuing education at the post-secondary level preparing for careers associated with restaurants, institutional food service, hospitality, and catering, as well as food and beverage operations.

Course Name	Credit	Grade Level
Complete 1 credit of:		
FACS Essentials A, B	½ per course	9-10
Complete 3 credits from the following:		
Foods and Nutrition A, B	½ per course	10-12
Culinary I A, B	½ per course	11-12
Culinary II A, B	1 credit	11-12

Fundamentals of Teaching Pathway

The Fundamentals of Teaching pathway will facilitate employment in early career ladder positions and promote continuing education at the post-secondary level preparing for careers associated with education and training in public and private school programs, elementary, middle, and secondary schools, after-school programs; higher education, nonprofit, and corporate settings.

Course Name	Credit	Grade Level
Complete 1 credit from the following:		
FACS Essentials A, B	½ credit per course	9-10
Relationships A	½ credit	10-12
Complete 3 credits from the following:		
Early Lifespan Development A	½ credit	10-12
Middle/Late Lifespan Dev A, B	½ credit per course	10-12
Principles of Teaching A, B, C	½ credit per course	11-12

Naval Science (JROTC) Pathway

Naval Science: A program that introduces students to the theory and practice of naval science, life in the U.S. Navy and prepares them for cadet leadership positions within the company (Junior ROTC or JROTC), enlisted service in the military (with advancement incentives) or for service as commissioned reserve or active duty officers (senior NROTC or ROTC). Programs are offered as adjuncts to regular high school instructional programs.

Course Name	Credit	Grade Level
Students must complete 3 credits from the following core classes:		
NJROTC 1 A, B, C	½ credit each	9
NJROTC 2A, B, C	½ credit each	10
NJROTC 3A, B, C	½ credit each	11
NJROTC 4A, B, C	½ credit each	12

*Cadets must start with Naval Science 1 and move through the list of Naval Science courses sequentially.

*There is a three year and also a four year certificate available. To earn the three year certificate, you must accumulate three credits from the below classes plus meet the necessary assessment scores on the appropriate standardized test.

*To earn the four year certificate, you must earn an additional credit and meet the necessary assessment scores on the appropriate standardized test.

MNHHS CAREER PATHWAYS

Arts and Humanities Pathways

Instrumental Music

Core Classes	Credit	Grade Level
*General Band	1 credit	9-12
Instrumental Ensemble A, B	½ per course	9-12
Jazz Ensemble A, B	½ per course	9-12
Music Appreciation A	½ credit	9-12

*These courses, except for Music Appreciation, can be completed up to 4 credits.

Vocal Music

Core Classes	Credit	Grade Level
*Chorus A, B, C	½ per course	9-12
*Vocal Ensemble A	1 credit	9-12
Music Appreciation	½ credit	9-12

*These courses, except for Music Appreciation, can be completed up to 4 credits.

Visual Arts

Core Classes	Credit	Grade Level
Drawing	½ credit	9-12
Painting	½ credit	9-12
Ceramics/Pottery	½ credit	9-12
Advanced Commercial Art	½ credit	9-12
Printmaking	½ credit	9-12
Sculpture	½ credit	9-12
Art Portfolio	½ credit	11-12
History/Appreciation of Arts Survey A	½ credit	9-12
Yearbook	1 credit	9-12
Bible as Literature A, B	½ per course	9-12
Floral Design	½ credit	10-12

Human Services Pathway

Core Course	Credit	Grade Level
Core Classes		
FACS Essentials A, B	½ per course	9-10
Psychology A, B	½ per course	9-12
AP Psychology	1 credit	10-12
AP Statistics	1 credit	10-12
Relationships A	½ credit	10-12
Sociology A, B	½ per course	10-12
Peer Tutoring A, B	½ per course	11-12
African American Studies	½ credit	9-12
AP Government	1 credit	11-12
Law and Justice	½ credit	9-12

Mathematics and Science Pathway

Course Name	Credit	Grade Level
Core classes		
Digital Literacy A, B	½ per course	9-10
AP Calculus	1 credit	12
AP Statistics	1 credit	10-12
AP Environmental Science	1 credit	10-12
AP Chemistry	1 credit	11-12
AP Biology	1 credit	10-12
Forensics A, B, C	½ credit per course	10-12
Body Structures A, B	½ per course	11-12
Statistics	1 credit	12
Engineering 1A, B	½ per course	9-12
Animal Science A, B	½ per course	10-12
Vet Science A, B	½ per course	10-12
Psychology A, B	½ per course	9-12
AP Psychology	1 credit	10-12

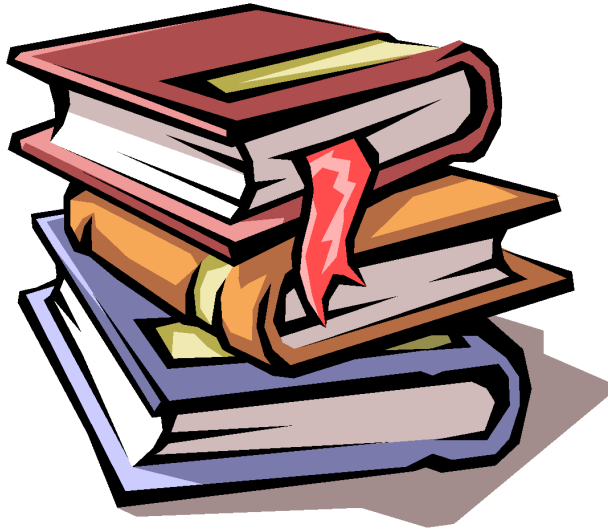
Public Service Pathway

Core Classes	Credit	Grade Level
Core Classes		
Forensics A, B, C	½ credit per course	10-12
Psychology A, B	½ credit per course	9-12
AP Psychology	1 credit	10-12
Digital Literacy A, B	½ per course	9-10
Sociology A, B	½ per course	10-12
Naval Science 1A, B, C Naval Science 2A, B, C Naval Science 3A, B, C Naval Science 4A, B, C	½ credit per course	1 (9 th Grade) 2 (10 th Grade) 3 (11 th Grade) 4 (12 th Grade)
AP Human Geography	1 credit	11-12
AP Government	1 credit	11-12
African American Studies	½ credit	9-12
Public Speaking	½ credit	9-12

World Language Pathway

Course Name	Credit	Grade Level
Core Classes		
Spanish 1A, 1B	½ per course	9-12
Spanish 2A, 2B or Pre AP Spanish 2	½ per course	10-12
Pre AP Spanish 3A, 3B	½ per course	10-12
DC SPA 101 and 102	1 credit each	11-12
AP Spanish Language AP Spanish Literature	1 credit 1 credit	11-12 12
Psychology A, B	½ per course	9-12
Sociology A, B	½ per course	10-12
AP Geography	1 credit	11-12

COURSE DESCRIPTIONS



AGRICULTURE

0307153 Principles of Agricultural Science A and B

Grades: 9-10 **Credit: ½ each**

Description: Principles of Agricultural Science provides instruction in the foundations of the various segments of the agricultural industry. Agricultural career opportunities will be emphasized. Animal science, plant and land science, and agricultural mechanics skills will be the focus of the curriculum. The selection and planning of an agricultural experience and related record keeping will be presented. Leadership development will be provided through FFA. Students will receive personal guidance and counseling with preparatory instructional program selection. **Students must take part A before part B. Students must be enrolled in or have taken this course before any other agriculture course.**

0307113 Agriscience A and B

Grades: 9-10 **Credit: ½ each**

Description: Agriscience introduces the scientific agricultural approach to animal science and selection, and plant and land science. Agricultural career opportunities will be emphasized in each class. Laboratory experiences relating to basic and current technology will be part of the program. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program and keep appropriate records.

0101213 Agriculture Employability Skills A

Grades: 11-12 **Credit: ½ credit**

Prerequisite: Principles of Agricultural Science A and B

Description: Agricultural employability skills provide opportunities to develop skills in: job searching, preparing resumes, writing letters of application, job interviews, attitude at work, communicating effectively, human relations and accepting responsibilities. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

010111 Agriculture Sales A

Grades: 11-12 **Credit ½ credit**

Prerequisite: Principles of Agricultural Science A and B

Description: This course provides an introduction to agricultural sales and marketing. Course material will include competition in the agriculture marketplace, marketing decisions, types of markets, contracting, government programs and regulations, personal development, employee and employer responsibilities, communications, promotion strategies, records, files, purchasing materials, stocking, selling, and business account procedures. Leadership development will be provided through FFA (Future Farmers of America). Each student will be expected to have a supervised agricultural experience program.

0205013 Animal Science A and B

Grades: 10-12 **Credit: ½ each**

Prerequisite: Principles of Agricultural Science A and B

Description: Animal Science develops basic knowledge and skills pertaining to livestock identification, selection, nutrition, reproduction and genetics, health management, and marketing of farm animals commonly produced in Kentucky. The latest production technologies, as well as, biotechnological applications will be included. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program. **Students must take part A before part B.**

0102413 A-Boys Agricultural Construction Skills A and B

010241G- Girls

Grade levels: 10-12

Credit: ½ each

Prerequisite: Principles of Agricultural Science A and B

Description: Agricultural Construction Skills prepares students to construct and maintain agricultural structures and equipment. It also develops basic skills such as: tool identification, interpreting plans, calculating a bill of materials, electrification, carpentry, welding, metal fabrication, plumbing, and masonry. Content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program. This course may be extended to two credits offered on a two-hour basis provided that instruction is enhanced with laboratory experience, project construction, and in-depth skill development.

307903 Agriculture Education Co-op

Grade level: 12

Credit: Up to 3

Prerequisites: Completed at least 3 agriculture credits in one agriculture pathway, have a 2.2 GPA, be a member of FFA, make plans to complete a supervised agricultural experience, and be enrolled in at least one agriculture course during senior year.

Description: This is an **agriculture work experience** opportunity where students work at least 15 hours per week during release time from school and have a job approved by the Work Site Experience Instructor. Hours and records must be kept to complete SAE. **The co-op experience application must be completed and submitted to the instructor before a schedule change will occur.**

010211 AGR 115 Agriculture Maintenance

Grade Level: 11-12

Credit: 1

Prerequisite: Agriculture Construction Skills and instructor approval

Description: Provides a study of basic maintenance issues (electrical, plumbing, fencing, building construction and repair, and safety) that arise in farming operations; and the practical troubleshooting and problem solving techniques.

0307911 AGR 180 Agriculture Internship 1 (1st trimester)

0307912 AGR 190 Agricultural Internship 2 (2nd trimester)

0307913 AGR 200 Agricultural Internship 3 (3rd trimester)

Grade Level: 12

Credit: 1 per course

Prerequisite: 3 credit in agriculture and instructor approval

Description: Provides the opportunity to broaden the educational experience through appropriate observation and individualizes work assignments related to the prerequisite and/or corequisite course objectives. The students will spend 80 hours of supervised field experience in an approved Agricultural Industry

Murray State University Racer Academy Dual Credit Courses- must be accepted into MSU's Racer Academy. See an agriculture teacher for more information.

AGR 100- MSU Animal Science

AGR 182- MSU Introduction to Pre Veterinary

AGR 140- MSU Plant Science

AGR 160- MSU Horticulture Science

AGR 199- MSU Contemporary Issues in Agriculture

ART

5007123A Drawing

Grades: 9 – 12

Credit: ½

Description: The drawing course covers the same topics as Creative Art - Comprehensive courses, but with a focus only on drawing. Students produce two-dimensional art works using a variety of media (ink, pencil, chalk, charcoal, watercolor, tempera, oils, acrylics, etc.)

5007123B Painting

Grades: 9- 12

Credit: ½

Description: The painting course covers the same topics as Creative Art - Comprehensive courses, but with a focus only on painting. Students produce two-dimensional art works using a variety of media (ink, pencil, chalk, charcoal, watercolor, tempera, oils, acrylics, etc.)

5007133 Sculpture

Grades: 9 – 12

Credit: ½

Description: This sculpture course cover the same topics as Creative Art-Comprehensive, but with a focus on creating three-dimensional works. Students work in several media (clay, ceramics, wood, metals, textiles, etc.) but some courses may focus on the use of only one medium.

5002123 Ceramics/Pottery

Grades: 9-12

Credit: ½

Description: Ceramics/Pottery focuses on creating three-dimensional works out of clay and ceramic material. Particular attention is paid to the characteristics of the raw materials, the transformation under heat, and the various methods by which objects are created and finished.

5007253 Printmaking/Graphics

Grades: 9 - 12

Credit: ½

Description: This course offers a focus on design principles, printmaking, and graphic design.

5007161 AP Studio Art

Grades: 11-12

Credit: 1

Prerequisite: 1 credit of Art and instructor approval

Description: The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios — 2-D Design, 3-D Design and Drawing — corresponding to the most common college foundation courses.

BAND

5009133 General Band

Grade levels: 9-12

Credit: 1

Prerequisite: Previous school year band experience or audition

Description: This course teaches music through group performance. The ensemble is comprised of wind and percussion and is designed to study, rehearse, and perform the repertory for the media. Functions include concert band, marching band, and pep band. **Band Camp and a significant amount of after school and weekend rehearsals and performances are an integral part of this course.** Optional functions include Solo and Ensemble Festival and All District Auditions. **This course may be repeated for up to four credits.**

CAREERS

3201033

Career Options

Grade Level: 9-12

Credit: ½

Description: This course is designed to assist students with exploring careers and developing skills necessary to make meaningful decisions about their career choice. This course will assist the students in assessing their personal strengths and weaknesses as they relate to career decisions. This course will aid the student in developing strategies to make an effective transition from school to work. The student will develop skills in this course that are generic to all occupations, such as properly preparing career documents needed to obtain employment.

CHORUS

5009253

Chorus A, B, C

Grade levels: 9-12

Credit: ½ each

Description: Vocal music courses provide the opportunity to sing and perform a variety of music styles for men's and/or women's voices, and are designed to develop vocal techniques and abilities. Students will also be graded by way of singing alone and with others, sight singing with solfege, and memorization tests. The student will also be obligated to perform at certain events scheduled during the school year.

5009263

Vocal Ensemble A

Grade levels: 9-12

Credit: 1

Prerequisite: Audition and recommendation from the director.

Description: Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing part in specialized vocal ensemble such as madrigal singers, chamber singers, a cappella groups, glee club, pop rock groups, etc. These courses may include the development of solo singing ability - one or several ensemble literature styles may be emphasized. **Public performances will be mandatory.** The Chamber Choir is comprised of the elite singers of the school, and they will sing more difficult literature and will perform more often. The group number will vary depending upon the balance of the ensemble.

ENGINEERING

2199013

Engineering 1A, 1B

Grades: 9-12

Credit: ½ each

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

ENGLISH

2301073

English I

Grade: 9

Credit: 1

Description: This course is built upon the student's language arts abilities gained in the elementary and middle school programs. This course will enable students to begin preparation for post-secondary career and educational plans. Content includes grammar study, composition, research skills, and speaking skills in both group and independent projects. Writing skills are enhanced through the use of the word processing programs in the school computer lab.

2301661 AP Language and Composition

Grade: 11 Credit: 1

Description: This is a college-level course focusing on rhetorical skills. The course engages students in becoming skilled readers of prose from a variety of disciplines, literary periods, and rhetorical contexts. Students will be asked to write in a variety of forms – narrative, expository, exploratory, and argumentative – on a variety of subjects ranging from personal experiences to public policies and popular culture. Its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate with mature readers. The course is designed to prepare the students to take the Advanced Placement Exam which gives college credit acceptable in many colleges and universities. Students are not required to take the test but are encouraged to do so. **Summer Reading Requirement: Students must complete a reading assignment during the summer (All The Light We Cannot See by Anthony Doerr). Be prepared to discuss, analyze, and complete any class projects during the first week of school. Students/parents are responsible for procuring this text. (AP National Examinations are in May)**

8000112DC Dual Credit English 101

Grade: 11, 12 Credit 1

Prerequisite: Recommendation from English teacher and have a minimum cumulative GPA of 3.0.

Description: A course in writing emphasizing argument. Instruction and practice reading critically, thinking logically, responding to texts, developing research skills, writing substantial essays through systematic revision, addressing specific audiences, expressing ideas in standard and correct English. Includes grammar and mechanics review

2301671 AP English Literature & Composition

Grade: 12 Credit: 1

Description: Students are expected to perform college level tasks and demonstrate sophisticated skills in literary analysis and expository composition. The course is designed to prepare the students to take the Advanced Placement Exam in English which gives college credit acceptable in many colleges and universities. Students are not required to take the test but are encouraged to do so. **Students must complete a reading assignment (1984 by George Orwell) during the summer and be prepared to discuss, analyze, and complete any class projects during the first week of school. Students/parents are responsible for procuring this text. (AP National Examinations are in May).**

8000113DC Dual Credit English 102

Grade: 12 Credit: 1

Prerequisite: Students who enroll in this class must be seniors who have previously taken AP Language and Composition as a junior and received a passing score on the exam OR have successfully completed English 101.

Description: This course focuses on academic writing. Provides instruction in drafting and revising essays that express ideas in Standard English, including reading critically, thinking logically, responding to texts, addressing specific audiences, researching and documenting sources. Includes review of grammar, mechanics and usage. It also emphasizes argumentative writing. Provides further instruction in drafting and systematically revising essays that express ideas in Standard English. Includes continued instruction and practice in reading critically, thinking logically, responding to texts, addressing specific audiences, and researching and documenting credible academic sources. **Students must complete a reading assignment (1984 by George Orwell) during the summer and be prepared to discuss, analyze, and complete any class projects during the first week of school. Students/parents are responsible for procuring this text.**

2391413 Yearbook Production 1

Grades: 9-12 Credit: 1

Prerequisite: Instructor Approval

Description: This course implements techniques and instruction from the prerequisite course, journalism with newspaper. Students will be actively engaged in the production of the school's print media and will be held responsible for meeting deadlines necessary for marketing and publication. Students are required to sell advertising after school hours as part of this course. This course is repeatable.

2310993 Public Speaking

Grades: 9-12

Credit: ½

Description: This course will teach students intra-personal, interpersonal, group discussion, and public speaking skills in addition to teaching students the principles of argumentation and debate. Students will learn how to analyze contemporary problems and issues, research topics, and organize material for effective oral presentations. Other areas of study include building self-confidence, enhancing interpersonal relationships, and resolving conflicts, applying effective interviewing techniques, interacting with groups, dealing with stage fright, and speaking in front of a group. Students will deliver a variety of speeches and performances in class, including informative, persuasive, impromptu, and extemporaneous speaking as well as debating and reading aloud.

2301273 Literature as a Genre

Grades: 10-12

Credit: ½

Description: This course will be a more in-depth study of the mythologies and fables. Students will be expected to make more connections between the various myths and fables and apply them to various writing tasks and projects.

2301253 Bible as Literature A and B

Grade Level: 9 - 12

Credits: ½ each

Description: This course is a study of the Old Testament and New Testament with emphasis on heroes, prophecies, and poetry. Part A is specific to the Old Testament and Part B is for the New Testament.

231211A Reading Development

Grade: 9-12

Credit: ½

Description: This course provides instruction for students with reading difficulties; focuses on skill acquisition, reading technique, reading comprehension strategies, and study skills. **Placement in this course is based on CERT scores.**

231211B Reading and English/Language Arts Intervention- 10th and 11th Grade

231211S

Reading and English /Language Arts Intervention- 12th Grade

Grade Level: 10-12

Credit: ½

Description: This course is for students who need additional time and support or for students in reading and English at the high school level who could benefit from enrichment and instruction. This course includes social sciences, natural sciences, humanities, and literary texts. **Placement in this course is based on ACT scores in Reading and English.**

FAMILY and CONSUMER SCIENCE

2001133 FACS Essentials A, B

Grades: 9-10

Credit: ½ each

Description: This comprehensive course provides opportunities for practicing basic life skills such as developing effective work and family relationships, selecting and caring for clothing, spending money wisely, preparing meals, choosing housing, raising children, and enhancing your personal growth. Leadership development will be provided through FCCLA. **This course meets a requirement for the Hospitality/Travel/Tourism pathway which is offered at the CTC.**

2004413 **Foods & Nutrition A, B**
Grades: 10-12 **Credit: ½ each**
\$5 lab fee/each term

Description: This course is designed to assist students in making critical decisions about food, which contribute to health and well-being. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, special health concerns and diets, management of food resources, preparation skills, and careers in nutrition and food service. Leadership development will be provided through FCCLA. **Part A must be completed before Part B. This course meets a requirement for the Hospitality/Travel/Tourism pathway which is offered at the CTC .**

2004113 **Culinary I A, B**
Grades: 11-12 **Credit: ½ each**
Prerequisite: Foods & Nutrition
\$5 lab fee each term

Description: This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning and the skills necessary to prepare for a career in the culinary arts. Leadership development will be provided through FCCLA.

2004123 **Culinary II A, B**
Grade: 11-12 **Credit: ½ each**
Prerequisites: Foods & Nutrition A,B and Culinary I and \$5 lab fee required for each term

Description: In this course students resume progress in pursuing competencies in food production and services. Orientation to the food service industry and development of food preparation skill are reinforced through a food related co-op experience. Food service management functions are introduced. More in-depth information is provided and higher levels of skills are taught. Time is provided for work based learning opportunities. Leadership development will be provided through FCCLA. Part A must be completed before Part B.

2001713 **Relationships A**
Grades: 11-12 **Credit: 1/2**

Description: This course assists students in developing self-understanding and the ability to understand others better, improving interpersonal skills both within and outside the family, being more considerate of other persons' needs and property, and maintain mental and emotional wellness. Family Life education comprises a portion of this course, including dating and married relationships. Preparations for the achievement of a successful marriage are emphasized. Leadership development will be provided through FCCLA.

2001213 **Money Skills A**
Grades: 10-12 **Credit: ½ credit**

Description: This course is designed to prepare students to understand and use sound financial management skills and practices contributing to financial stability, improving the quality of life for individuals and families. Decision-making, problem solving, goal setting and using technology are integrated throughout the content. Leadership development will be provided through FCCLA.

200226 **Middle to Late Lifespan Development A, B**
Grades: 10-12 **Credit: ½ each**

This course addresses the practical problems related to understanding the types and stages of human growth and development, recognizing the effects of heredity and environment on the life stages, meeting the needs of exceptional children, promoting optimum growth and development in the middle childhood, adolescence, and adulthood stages. Careers in child/human development and adult care services are explored. Leadership development will be provided through FCCLA.

FUNDAMENTALS OF TEACHING

3202103 Principles of Teaching A, B, C

Grades: 11-12 Credits: ½ for A, 1 credit each for B and C

This course provides opportunities for students with an interest in teaching to develop skills, strategies, and techniques used for instruction at various grade levels. Instruction addresses the principles and procedures for promoting the physical, emotional, social, and intellectual development of children, adolescents and developmentally appropriate practices in educational settings. Students will gain work experience in classrooms with certified teachers as part of their course work. Other components include the development of a four-year post-secondary plan, salaries and benefits of a teacher, job security, and future projections of the job market. Leadership experiences will be provided through a Career and Technical Student Organization.

200223 Early Lifespan Development A

Grades: 10-12 Credit: ½ credit

This course addresses the concepts related to understanding the areas and stages of human growth and development, recognizing effects of heredity and environment on human growth and development, meeting the needs of exceptional children, promoting optimum growth and development in the infancy, toddler, and preschool stages. Careers in child/human development are explored. Leadership development will be provided through FCCLA.

HEALTH/PE

3401333 Health Education

Grade 9 Credit: ½

Description: Health Education is required of all freshmen students. Studies in the health area will include units on alcohol, tobacco, drugs, human growth and reproduction, diseases and disorders, mental-emotional well-being, and the general maintenance of good health and overall wellness.

3402163 PE 1

Grade 9 Credit: ½

Description: Physical Education 1 is a required course for all freshmen. The physical education class will place emphasis on lifetime wellness, overall fitness, and conditioning.

3402193 Advanced PE

Grades: 10-12 Credit: ½

Description: This course shall consist of a continuation of activities included in Physical Education I with emphasis on advanced skill development, rule knowledge and strategy acquisition, as well as high levels of personal fitness.

340214BA Boys Fitness Conditioning

340214GA Girls Fitness Conditioning

Grades: 10-12 Credit: ½

Description: This course is designed to allow students the opportunity to achieve high levels of personal fitness through participation in a weight training program. Emphasis will be placed on muscular and cardiopulmonary development through circuit weight training. Other areas of study will include the following: principles of fitness training, injury prevention, and lifetime fitness strategies.

270702 Integrated Math 2

Grade: 10 Credit: 1

Description: This course is the second year of Integrated Mathematics. The integrated approach to high school mathematics is typically seen internationally and consists of a sequence of three to four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway: Algebra 1 and Geometry. Typically Integrated 2 has a blend of geometric and algebraic concepts along with probability.

2703122 Pre AP Algebra 2

Grade: 10 Credit: 1

Prerequisite: Pre AP Algebra 1 and Pre AP Geometry

NOTE: Students identified as Gifted and Talented in this area are given preference for enrollment into this course.

Description: This course is intended for students who master concepts quickly and retain skills well. In addition to expanding the mathematical concepts of Algebra 1, emphasis is placed on preparation for the study of higher mathematics. The course stresses abstract thinking skills, functions and the algebraic solution of problems in various content areas.

2704013 Geometry

Grade: 10 Credit: 1

Prerequisite: Algebra 1

Description: This course is designed for the majority of college-intending students. Focus is on discovery and realistic applications of geometric relationships and principles. Topics studied include constructions, volume, surface area, points, lines, planes, angles, triangles, planar figures, similarity and congruence, and circles.

2703113 Algebra 2

Grade: 11 Credit: 1

Prerequisite: Algebra 1 and Geometry

Description: This course is a survey of linear algebra, quadratics, series, and probability. Students completing this course will have completed Kentucky's Core Concepts for mathematics.

2705022 Pre AP Pre-Calculus

Grades: 11-12 Credit: 1

Prerequisite: Pre AP Algebra 2

Description: This course is designed for students who plan to take AP Calculus. It includes the topics traditionally taught as Trigonometry and Analytic Geometry and integrates additional work with other functions.

30708A Agriculture Math A

Grades:11-12 Credit: 1

Prerequisite: Teacher Approval Required

Description: This course is designed to emphasize high school math core content by utilizing agricultural education as the content for delivering the math concepts. A correlation to the math content in the program of studies was used in developing this course to count as a 4th math elective. Students will also be enrolled in the Agricultural Structures.

270703 Integrated Math 3

Grade: 11 Credit: 1

Description: This course is the third course of Integrated Mathematics. The integrated approach to high school mathematics is typically seen internationally and consists of a sequence of three to four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway: Algebra 1, Geometry and Algebra 2. Typically, Integrated 3 has a blend of geometric, algebraic and statistical concepts using modeling.

707143 Algebra 2 CS

Grade 12

Credit: 1

Prerequisite: Algebra 1 CS

Description: This course is designed to build upon the algebraic foundation of Algebra 1 CS by extending the concepts and real-world applications. This course's purpose is to prepare students for success in college, career, and daily life in the 21st Century.

2705013 Pre-Calculus

Grade levels: 11-12

Credit: 1

Prerequisite: Algebra 2 or Pre AP Algebra 2 with Teacher Recommendation and an ACT of 19 or higher

Description: Students will be exposed to rigorous, college level algebra from the perspective of functions. This class will not include the trigonometry covered in the Pre AP Pre-Calculus course that is needed for students to enroll in either AP Calculus AB/BC.

2703213 Algebra 3

Grade Level: 12

Credit: ½

Prerequisite: Algebra 2

Description: This course is designed for students who are intending to attend college, vocational, or technical school and are in need of additional preparation in order to be successful in credit-bearing College Algebra, or for students who feel in need of additional preparation to take College Algebra. The content goes beyond a traditional Algebra 2 course and fulfills the 4th math requirement.

270704 Integrated Math 4

Grade: 12

Credit: 1

Description: An integrated approach to high school mathematics is typically seen internationally and consists of a sequence of four courses depending on school's curriculum; each course includes number, algebra, geometry, probability and statistics and is no less rigorous than a traditional pathway of Algebra 1, Geometry, Algebra 2 and Pre-Calculus. This course is the fourth year of an integrated mathematics sequence and should address the remaining required standards not included in Integrated 3 and the (+) standards included in the Kentucky Academic Standards.

2706023 Statistics

Grade 12

Credit: ½

Description: This course will prepare students for a first year college statistics class by emphasizing the concepts of statistics. Statistical methods are presented with a focus on understanding both the suitability of the method and the meaning of the result.

2706041 AP Statistics

Grade levels: 10-12

Credit: 1

Prerequisite: Pre AP Algebra 1 and Pre AP Geometry or teacher approval

Description: The purpose of the Advanced Placement course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns in Advance, and Statistical Inference. Students who successfully complete the course and the AP examination may receive credit and/or advanced placement in college. **(AP National Examinations are in May)**

2705131 AP Calculus AB

Grade 12

Credit: 1

Prerequisite: Pre AP Pre-Calculus

Description: This course is designed to introduce students to the concepts of Differential Calculus and Integral Calculus and to prepare them for the Advanced Placement (AP) Calculus AB Exam. Topics of study will include but are not limited to functions, graphs, limits, derivatives, and integrals. **(AP National Examinations are in May)**

304521 Chemistry I**Grade Level: 10 1****Credits: 1**

Description: This course focuses on problem solving techniques; bonding; equilibrium; equations. Students develop a conceptual understanding of chemistry content, outlined in the Kentucky Academic Standards. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

3045272 Pre AP Chemistry**Grades: 10-12****Credit: 1**

NOTE: Students identified as Gifted and Talented in this area are given preference for enrollment into this course.

Description: This course is designed to give students a basic background in the interactions between various forms of matter and the changes they undergo. The course consists of both theory and laboratory work. Mathematical skills and calculators are used to a great extent. Computers will also be utilized in the lab setting.

304021 Physical Science**Grade: 10****Credit: 1**

Students develop a conceptual understanding of physical science, as outlined in the Kentucky Academic Standards for Science. They experience physical science concepts such as structure of atoms, structure and properties of matter, chemical reactions, motions and forces, conservation of energy and increase in disorder, and interactions of energy and matter. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

304611 Earth Space Science A, B**Grade: 11****Credit: ½ per course**

Students develop a conceptual understanding of Earth/space science, as outlined in the Kentucky Academic Standards for Science, through the use of science and engineering practices. They experience Earth/space concepts such as energy in the Earth system, geochemical cycles, formation and ongoing changes of the Earth system, and formation and ongoing changes of the universe. Students will learn these core ideas within these topics through the use of the science and engineering practices and crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science.

304821 Physics I**Grade Level: 11****Credit: 1**

Description: Students develop a conceptual understanding of physics as outlined in the Kentucky Academic Standards for Science. They experience concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter.

3048281 AP Physics 1**Grades: 11-12****Credit: 1**

Prerequisite: Geometry and Algebra 2 (or concurrent)

Description: This is a full-year course that is the equivalent of an introductory college course in algebra-based physics. Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six big ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. **(AP National Examinations are in May)**

CHE 140 (Dual Credit Chemistry)**Grade levels: 11-12****Credit: ½**

Description: Introduces topics in general chemistry, including properties of matter, stoichiometry, gases, atomic structure, bonding, acids and bases, oxidation and reduction, and nuclear chemistry. Intended for students interested in a one-semester course in general chemistry and recommended for students seeking careers in allied health fields. Scientific calculator required. May be taken for college credit through MCC as CHE 140.

SOCIAL STUDIES**4510013****Civics****Grade Levels: 9****Credit: ½**

Description: Civics promotes the knowledge of historical foundations and principles of American government toward the goal of civic engagement. Major topics include the roles of local, state, and national institutions including citizenship, the Constitution, domestic and foreign policy, and economics.

4507093**Human Geography****Grade 9****Credit: ½**

Description: Human and Cultural Geography uses the five themes of geography of location, place, region, movement, and human-environment interaction as well as the eighteen National Geography Standards to introduce students to the study of the physical features of Earth's surface as well as the human aspect of those who inhabit it including government, social, and economic organization in the United States and around the world. Students learn to use maps and other geospatial data, study global migrations and their implications, explore the relationship between humans and their physical world, and study the patterns and networks of economic interdependence on regional and global scales.

4507092**Pre AP Human Geography****Grade 9****Credit: ½**

NOTE: Students identified as Gifted and Talented in this area are given preference for enrollment into this course.

Description: Pre-AP Human and Cultural Geography is a rigorous course which uses the five themes of geography and follows the National Geography Standards in order to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to interpret maps and analyze geospatial data, understand the associations and networks of phenomena in particular places and explain their implications, recognize and interpret the relationships among patterns and processes at different scales of analysis, as well as learn to define regions. This course serves as an introduction to the physical features of Earth's surface and the human aspects of those who inhabit it including government, social, and economic organization in the United States and around the world.

4510012**Pre AP Civics****Grade Levels: 9****Credit: ½**

Description: Pre-AP Civics follows the National Standards for Civics and Government and is a rigorous course which studies the role of the citizen and the government in the United States. Citizenship, the foundations of American government, federal, state, and local government and their roles and functions, the Constitution and its principles, the law, and foreign policy are the major topics of study and analysis. Pre-AP Civics explores the overarching questions of the meaning of civic responsibilities, politics, and government, the foundations of the American political system, how the government established by the Constitution embodies the purposes, values, and principles of American democracy, the relationship between the U.S. and other nations, the roles of the citizen in American democracy, and economic concepts needed to be economically informed and engaged citizens.

4511213 **Sociology A, B**

Grade levels: 10-12 **Credit: ½ each**

Description: Sociology is the scientific study of human society. It is concerned with the behavior of human beings in group situations. The study of sociology, therefore, consists of trying to understand: The basic units and institutions of social life, such as the family, schools, neighborhoods, rural and urban communities, and the many other kinds of groups with which humans identify.

4510393 **Law and Justice**

Grade Levels: 9- 12 **Credit: ½**

Description: Law and Justice is the study of law-civil, criminal, constitutional, and international; the legal and justice systems. Students will examine the need for rules and regulations; interpretations of the constitution, both state and federal; Supreme Court decisions; the Bill of Rights, and individual rights law, criminal law, family law, and consumer law. The study of the basic social contracts of society will enable students to understand the preferred democratic values: justice, equality, responsibility, and freedom, rule of law, human rights, honesty, equity, rational process and human dignity.

4508773 **African American Studies**

Grade Level: 9 - 12 **Credit: ½**

Description: African American History will trace the historical, political, societal, economic and cultural issues from ancient Africa through the African American experience. Emphasis will be placed on contemporary issues facing African-Americans.

SPANISH

1611083 **Spanish 1 A, B**

Grade levels: 9-12 **Credit: ½ each**

Description: This course is designed to provide students the basic knowledge of form and function of Spanish. The students will be developing all skills in the target language: listening, reading, writing, and speaking. The focus is to be able to communicate in everyday situations at a novice low level to a novice mid-level and to understand the basics of the Spanish-speaking cultures.

1611093 **Spanish 2 A, B**

Grade levels: 10-12 **Credit: ½ each**

Prerequisite: Spanish 1

Description: This course is to provide students an intermediate knowledge of form and function of Spanish. The students will be developing all skills in the target language: listening, reading, writing, and speaking. The focus is to be able to communicate in everyday situations at a novice-high to intermediate-low level and understand the basics of the Spanish-speaking cultures.

1611091 **Pre-AP Spanish 2 A, B**

Grade levels: 10-12 **Credit: 1**

Prerequisite: Spanish 1 with an A and teacher recommendation.

Description: This course is to provide students the knowledge of form and function of Spanish. This is an accelerated Spanish 2 course that prepares students for Spanish 3, AP Spanish, college classes, and overall fluency. The students will be developing all skills in the target language: listening, reading, writing, and speaking. The focus is to be able to communicate in everyday situations from novice-high to intermediate- low level and understand the fundamentals of the Spanish-speaking cultures. As a Pre-AP course, preparation for fluency is emphasized. **This is a now a three trimester course, as the Pre-AP students will also be expected to enroll in Spanish 3A for the third trimester. This will allow them to take Spanish 3B next year and finish up the program with two trimesters of AP Spanish Language, if they choose.**

Madisonville Community College (Dual Credit)
Aviation Courses
2021-2022 Course (Online)

GEO 251 Weather and Climate

Grade Level: 12

Description: A survey of the atmospheric controls associated with local, regional, and global weather and climate variability. Includes fundamental coverage of the physics and chemistry of energy, gases, pressure and moisture, with a goal of promoting understanding of general weather analysis and forecasting, severe storms, atmospheric pollution, descriptive climatology, and global climate change.

CIT 105 Introduction to Computers

Grade Level: 12

Description: Provides an introduction to the computer and the convergence of technology as used in today's global environment. Introduces topics including computer hardware and software, file management, the Internet, e-mail, the social web, green computing, security and computer ethics. Presents basic use of application, programming, systems, and utility software. Basic keyboarding skills are strongly recommended.

FWT 101 Private Pilot Fixed Wing Ground School

Grade Level: 12

Description: Covers fundamentals of fixed wing flight, flight operations, aviation weather, performance, navigation, aircraft systems, aeronautical publications, FAA regulations, flight planning, radio procedures, and metrology and human factors. Prepares students for the FAA Fixed Wing Private Pilot Airman Knowledge Exam

MAT 150 College Algebra

Grade Level: 12

Description: Includes selected topics in algebra and analytic geometry. Develops manipulative skills and concepts required for further study in mathematics. Includes linear, quadratic, polynomial, rational, exponential, logarithmic and piecewise functions; systems of equations; and an introduction to analytic geometry.

Madisonville Community College (Dual Credit)
Electrical Courses
(Space in these courses is limited to 3-4 students)

460316 ELT 110 MCC Circuits I

Grade: 12

Prerequisite: MAT 065 or equivalent placement level

Description: Introduces application of basic DC and AC circuits, including circuit analysis techniques with discussion of introductory magnetism and transformer principles. Emphasizes design, construction, and troubleshooting of simple DC and AC circuits in laboratory exercises.

460323 EET 264 Rotating Machinery

Grade: 12

Prerequisite: ENGT 110 and ENGT 114 with a minimum grade of C] or consent of Electrical Technology program advisor(s). Corequisite: EET 265

Description: Focuses on the underlying principles of rotating electrical equipment including DC and AC motors and generating equipment construction, operating applications, and the maintenance of DC and AC motors and generating equipment..

460325 EET 265 Rotating Machinery Lab

Grade: 12

Prerequisite: ELT 110 or EET 119 with a minimum grade of "C" or consent of Electrical Technology program advisor(s). Corequisite: EET 264.

Description: Focuses on the principles of operation, application and maintenance of single-phase and three-phase AC motors and AC alternators, DC motors, DC generators. A study of and compliance with the National Electrical Code standards.

Madisonville Community College (Dual Credit)
Mining Courses
(2nd and 3rd Trimesters)

MNG 160 Elements of Underground Mining

MNG 161 Elements of Underground Mining Lab

Grade Level: 12

Description: Introduces underground mining methods, operations, and procedures. Includes topics of miners' rights, work environments, health and safety standards, roof control, mine ventilation, transportation, communication, compressed gas cylinders, explosives, mine gases and instruments, electrical hazards, accident prevention, and emergency procedures.

WPP 200 Workplace Principles

Grade Level: 12

Description: Workplace Principles examines the changing workforce and the skills needed to adapt to constantly changing demands and expectations. The course includes but is not limited to problem solving, teamwork, time management, and self-management skills. Job-seeking and job-retention skills are taught through the development of resumes and job search materials.

Madisonville Community College (Dual Credit)
Welding Courses
(Space in these courses is limited to 3-4 students)

4805243A WLD 100(2) Oxy-Fuel Systems

Grade: 12

Co-requisite: WLD 101 or Consent of Instructor

Description: A working knowledge of oxy-fuel identification, set-up, inspection, and maintenance; consumable identification, selection and care; principles of operation; and effects of variables for manual and mechanized oxy-fuel cutting, welding, brazing principles and practices, and metallurgy. Shop safety and equipment use are also covered.

480524 WLD 101 Oxy-Fuel Systems Lab

Grade: 12

Co-requisite: WLD 100 or Consent of Instructor

Description: Manipulative skills necessary to weld and cut plate and pipe in all positions, as well as brazing, braze welding, and gouging.

4805243B WLD 120 Shielded Metal Arc Welding

Grade: 12

Corequisite: WLD 121 or Consent of Instructor

Description: Teaches students the identification, inspection, and maintenance of SMAW electrodes; principles of SMAW; the effects of variables on the SMAW process to weld plate and pipe; and metallurgy.

480536 WLD 121 Shielded Metal Arc Welding Fillet Lab

Grade: 12

Corequisite: WLD 120 or Consent of Instructor

Description: Provides laboratory experiences in which the student acquires the manipulative skills to perform fillet welds in all positions.

480525 WLD 130 Gas Tungsten Arc Welding

Grade: 12

Corequisite: WLD 131 or Consent of Instructor

Description: Identification, inspection, and maintenance of GTAW machines; identification, selection and storage of GTAW electrodes; principles of GTAW; the effects of variables on the GTAW process; and metallurgy. This course also teaches the theory and application of Plasma Arc Cutting..

480530 WLD 131 Gas Tungsten Arc Welding Fillet Lab

Grade: 12

Corequisite: WLD 130 or Consent of Instructor

Description: Teaches the necessary manipulative skills needed to apply the Gas Tungsten Arc on various joint designs on plate with both ferrous and non-ferrous metals. Plasma Arc cutting included.