



***Mehlvilleville School District***

*Individually Focused. Committed to All.*

# Curriculum Handbook

## Eighth Grade

2021 - 2022



Dear Parents, Guardians, Students and Families of the Mehlville School District:

The Curriculum Department is pleased to present you with the Mehlville School District Eighth Grade Curriculum Handbook. This handbook has been developed to help you understand what children should know and be able to do by the end of each grade level in each subject area.

This handbook is revised annually and includes Board-approved curriculum revisions to help meet the identified educational objectives for your child's grade level. Our teachers, principals and directors have provided suggestions for families to enhance and assist with your child's learning. We hope this handbook is helpful to you in having meaningful discussions with your child and your child's teacher about the curriculum being taught in their classroom.

Mehlville teachers and administrators work diligently to provide the best education possible for your children. We appreciate your support and the opportunity to serve in such a wonderful community. If you have any questions or comments regarding curriculum, feel free to contact your teacher, principal, curriculum directors (listed in the Acknowledgements section at the back of this book), or me. We welcome your thoughts and appreciate hearing from you.

The Mehlville School District provides educational opportunities for students and families from birth through adulthood. We are very proud to serve thousands of families beginning with our Parents as Teachers Program (PAT), Early Childhood Program, K-12 Programs, and our Community Education Program. It is our hope these important programs enhance the quality of life for all district patrons.

To access the handbook online, please go to [www.mehlvilleschooldistrict.com](http://www.mehlvilleschooldistrict.com), click on Curriculum, then Handbooks. We are happy to provide hard copies for families that prefer them over online access. Please take a few moments to look at the handbook and feel free to let us know your thoughts regarding the prepared documents.

The Mehlville Board of Education, Central Office Team, Principals, Curriculum Directors, Teachers and Support Personnel all wish you and your child a successful school year.

Sincerely,  
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# Core Curriculum Class Offerings

## English Language Arts

### 8th Grade English Language Arts (M0800)

The student in 8th Grade Language Arts will develop writing, speaking, and reading skills to prepare them for success in high school. The student will write on a regular basis, with an emphasis on responding to peers and to texts, and they will develop strong academic practices and strategies, including analyzing texts, citing sources, and editing their work, as well as discussion, presentation, and collaboration. The student will develop strong analytical and reading strategies with both literary and non-fiction texts. The student will respond to literature and other texts in class discussion, peer groups, and through writing as well as informal and formal presentations.

#### Course Objectives

- The student will write a minimum of three polished, multi-paragraph essays over the course of the year, following a writing process that includes revision and editing for standard English usage; genres will include expository, argumentative, and narrative writing.
- The student will write informally on a weekly basis, analyzing and responding to texts, and incorporate evidence from texts.
- The student will follow a style guide to format essays and projects and to cite sources while avoiding plagiarism.
- The student will participate in informal discussions, presentations, peer feedback, or collaborative groups on a daily basis.
- The student will plan and present formally a minimum of one time over the course of the year with an emphasis on developing presentation skills (such as eye contact, tone, volume, pace, articulation, and pronunciation); the presentation may be collaborative or multi-media.
- The student will complete two polished researched projects, at least one of which will be an essay, distinguishing among and utilizing a minimum of five credible sources.
- The student will engage monthly in formal and informal research.
- The student will read, discuss, analyze, and apply literary devices to a minimum of three longer volumes of work, including at least one novel and at least one non-fiction piece, at an appropriate level of text complexity.
- The student will read extensively in a variety of genres, including short fiction, short nonfiction and informational text and poetry, averaging a minimum of 50 pages of reading per week at an appropriate level of text complexity.
- The student will write informally on a weekly basis, analyzing and responding to texts, and incorporating evidence from texts.
- The student will participate in informal discussions, presentation, peer feedback, or collaborative groups on a daily basis.
- The student will plan and present formally a minimum of one time over the course of the year with an emphasis on developing presentation skills such as eye contact, tone, volume, pace, articulation and pronunciation.
- The student will engage monthly in formal and informal research.

## **Creative Writing (elective option) (M0101)**

The creative writing student will write original narrative pieces and poetry through the writer's workshop. The student will explore a variety of techniques including the use of figurative language, generating writing ideas, and finding artistic inspiration. The student will share their work with peers and with outside audiences, including submitting works for publication.

### Course Objectives

- The student will write daily and will engage in the Writer's Workshop with an expectation of producing a minimum of 3 polished pieces during the semester to be shared with peers and outside audiences.
- The student will apply pre-reading, during reading and post reading strategies for comprehension and interpretation by analyzing mentor texts.
- The student will utilize the writing process to organize, revise, and produce original works in narratives and poetry while meeting deadlines.
- The student will organize, revise, and edit their writing for both Standard English grammar and creative effect.
- The student will listen effectively as demonstrated through a variety of oral and written responses, note taking, and classroom discussion.
- The student will showcase fresh ideas and pay careful attention to meaningful word choice.
- The student will develop a voice in their writing, an understanding of personal style, and pay careful attention to the audience and purpose.

Parents/Families may assist their children by:

- Checking their student planner
- Reviewing completed homework
- Reading and discussing what was read
- Calling the homework hotline
- Encouraging their child to always have a book with them to read

## **Publications (year-long elective) (M0301)**

In this course, the student produces the middle school yearbook, school newsletter, and school videos. Each student learns publication skills, including copy writing and reporting, marketing, layout and design, photography, script writing, presentation skills, and editing. The student learns to accept responsibility for deadlines and collaborating with peers.

### Course Objectives

- The student will successfully master and apply basic design skills.
- The student will create computer layouts that follow basic design principles.
- The student will demonstrate time management and organizational techniques.
- The student will demonstrate basic production skills and concepts.
- The student will master and apply successful interviewing and reporting techniques.
- The student will write copy across multiple platforms.
- The student will develop formal and informal oral presentation skills.
- The student will develop and apply knowledge of marketing strategies.

# Health

## Health - 8th Grade (M8682)

8th Grade Health students will practice effective decision making, analyze cause and effect, and develop core health content knowledge. In 8th grade, students will focus on sexual health, emotional health, and the consequences of high risk behaviors. Students will discuss topics such as alcohol and drug use, sexually transmitted diseases, pregnancy, and suicide risks and prevention. Students will locate and utilize resources through research to learn the most current information available on these topics. The course discussions will provide students with the knowledge and skills to create and maintain healthy relationships.

### Course Objectives:

- The student will apply effective decision making skills in the areas of sexual health, high risk behaviors (including alcohol and drug use), and emotional health.\*
- The student will analyze how their decisions can create healthy interpersonal and community relationships and tolerance.
- The student will analyze cause and effect relationships in health decisions, including sexually transmitted disease, pregnancy, drug and alcohol use, and suicide prevention. \*
- The student will develop and apply skills to prevent the negative effects of high risk behaviors. \*
- The student will identify the components of the reproductive system and central nervous system and will analyze how personal choices can impact those systems. \*
- The students will develop personal health planning strategies in the areas of sexual health and other high risk behaviors. \*
- The student will evaluate the quality of various resources and conduct independent research into personal and community health issues.

\* This objective addresses Senate Bill 163, Sexual Education and Abstinence.

### Parents/Families may assist their children by:

- discussing strategies to avoid acceptance of tobacco, alcohol and other drugs
- discussing health issues related to adolescence
- modeling a healthy lifestyle
- talking to them about healthy eating habits
- encouraging good personal hygiene habits

# Mathematics

## Math 8 (M2800)

This course continues the developmental approach to Algebra, begun in Math 7, showing the student how algebraic concepts relate to other content areas and the student's everyday experiences. This is a program in which the student learns to state everyday problems in clear algebraic language and to solve them using algebraic procedures. The student learns basic algebraic notation, terminology, and concepts that lead to solving linear equations and quadratic equations. The student will learn to generalize, think spatially, and reason statistically.

Course Objectives:

- The student will be able to solve multi-step equations including systems of linear equations in slope-intercept form.
- The student will find the volume of cylinders, cones, and spheres in real-world problems.
- The student will construct linear functions.
- The student will create linear equations from scatterplots.
- The student will simplify basic expressions with integer exponents.
- The student will perform multiple transformations on geometric shapes.
- The student will write and compare numbers written in scientific notation.
- The student will solve problems involving angles of triangles.

Parents/Families may assist their children by:

- using everyday mathematical examples to solve problems
- pointing out uses of negative numbers in everyday occurrences
- reviewing their homework
- attending parent conferences at school
- providing a quiet study time for homework
- calling the homework hotline to check assignments

## Algebra I (2810)

Algebra I is a challenging approach to algebra, in which students learn to state everyday problems in clear algebraic language and to solve them by algebraic procedures. Students may earn advanced-standing credit by successfully completing high-school level courses prior to entering the ninth grade. Advanced-standing credit may count toward meeting all graduation requirements, including state minimum requirements.

Course Objectives: In the area of Number and Operations, the student will:

- compare and order rationals and percents, including finding their approximate locations on a number line
- use real numbers and various models and drawings to solve problems recognize equivalent representations for the same number and generate them by decomposing and composing numbers, including scientific notation
- solve problems involving proportions, such as scaling and finding equivalent ratios
- describe the effects of operations such as multiplication and division, and compute powers and roots on the magnitude of quantities

In the area of Algebraic Relationships, the student will:

- generalize patterns represented graphically or numerically using words or symbolic rules, including recursive notation
- compare and contrast various forms of representations of patterns
- understand and compare properties of linear or nonlinear functions from tables, graphs or equations
- describe the effects of parameter changes on linear, exponential growth/decay and quadratic functions, including intercepts
- use symbolic algebra to represent and solve problems that involve linear and quadratic relationships, including equations and inequalities
- generate equivalent forms for simple algebraic expressions that include all rationals
- model and solve problems using multiple representations, such as graphs, tables, equations or inequalities



- analyze the nature of changes (including slope and intercepts) in quantities of linear and quadratic relationships
- use and solve systems with two variables (linear, absolute value and quadratic)
- describe and use algebraic manipulations, including factoring and rules of integer exponents, and apply properties of exponents, including order of operations, to simplify expression
- identify quantitative relationships and determine the type(s) of functions that might model the situation to solve the problem

In the area of Geometric and Spatial Relationships, the student will:

- describe, classify, and generalize relationships between and among two- and three-dimensional objects using their defining properties to include the Pythagorean Theorem and the two-dimensional shape that results from taking the cross-section of a three-dimensional object
- apply geometric properties such as similarity and angle relationship to solve multi-step problems in two-dimensions
- use coordinate geometry to analyze properties of right triangles and quadrilaterals, including the Pythagorean Theorem
- reposition shapes under formal transformations such as reflection, rotation and translation
- describe the relationship between the scale factor and the area of the image using dilation (stretching/shrinking)
- identify the number of rotational symmetries of regular polygons
- draw or use visual models to represent and solve problems
- create isometric drawings from a given net plan

In the area of Measurement, the student will:

- convert square or cubic units to equivalent square or cubic units within the same system of measurement
- analyze precision and accuracy in measurement situations and determine number of significant digits
- solve problems of angle measure, including those involving triangles and parallel lines cut by a transversal
- use unit analysis to solve problems

In the area of Data and Probability, the student will:

- formulate questions, design studies and collect data about a characteristic
- select, create and use appropriate graphical representation of data, including scatter plots and box plots (box and whisker)
- find, use and interpret measures of center, outliers and spread, including range and interquartile
- compare different representations of the same data and evaluate how well each representation shows important aspects of the data
- make conjectures about possible relationships between two characteristics of a sample on the basis of scatter plots of the data and approximate lines of fit
- determine an equation for a line of best fit, given a scatter plot

Parents/Families may assist their children by:

- using everyday mathematical examples to solve problems
- pointing out uses of negative numbers in everyday occurrences
- reviewing their homework
- attending parent conferences at school
- providing a quiet study time for homework
- calling the homework hotline to check assignments

# Physical Education

## **Physical Education – 8th Grade (M8582)**

Students in 8th Grade Physical Education will actively engage in self-enhancing physical fitness through sport and lifetime fitness skills with the goal of developing strong, permanent personal health habits. The course will provide students with advanced skill instruction related to individual, dual, and team sport activities.

### Course Objectives:

- The student will regularly participate in vigorous physical activity inside and outside of class.
- The student will respond appropriately to participants' ethical and unethical behavior during physical activity by using rules and guidelines for resolving conflicts.
- The student will independently apply social and safety skills with respect to self and others.
- The student will identify and apply physiological principles of health enhancing physical fitness.
- The student will actively participate in lifetime and team sports, as well as developing skills in a self-identified sport of interest.
- The student will participate in lead up games and activities in order to develop rule comprehension, strategies and proper etiquette.
- The student will exhibit command of rhythm and timing by creating and participating in rhythmic physical activities.
- The student will actively participate in the Presidential Youth Fitness Program and complete the FitnessGram Test or the Brockport fitness test twice a year.

## **Lifetime Fitness (Elective Option in Physical Education) (M8501)**

Fitness consists of a variety of aspects: muscular strength, muscular endurance, cardiovascular condition/endurance, and flexibility. This course is designed to instruct individual students about exercise activities to improve strength, endurance, and flexibility and to assist the student in developing personal and lifelong fitness goals.

### Course Objectives

- The student will participate in a variety of sport and lifetime/recreational activities to understand the importance of being physically fit.
- The student will identify and apply principles of training and conditioning for physical activity.
- The student will set personal fitness goals and will create a personal fitness plan based on research.
- The student will research, create, and lead small group physical activities, such as class warm-ups, dances, and games.
- The student will describe and practice ethical personal and group conduct appropriate for engaging in games, sports, and life, such as kindness, sportsmanship, and positive collaboration.

### Parents/Families may assist their children by:

- encouraging them to participate in sports
- exercising with them
- making sure they “dress out” for gym
- talking to them about sportsmanship and fair play

# Science

## Science 8 – Physical Science (M3800)

The middle school physical science course will continue to develop understanding of four ideas in physical science including matter, chemical reactions, forces and interactions, and waves with the transfer and conservation of energy embedded in each of the four areas. The performance expectations in physical science blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing usable knowledge to explain real world phenomena in the physical, biological, and earth and space sciences.

Assessment of student achievement in science includes, but is not limited to, observation checklists, end-of-unit exams, performance tasks, quizzes, laboratory reports, science journals, concept maps, and Missouri Assessment Program (MAP) testing.

Course Objectives: In this course,

- The student will demonstrate proficiency in developing and using models.
- The student will plan and conduct investigations.
- The student will analyze and interpret data.
- The student will use mathematical and computational thinking
- The student will construct explanations to demonstrate understanding of core ideas.
- The student will formulate answers to the following questions:
  - “How can particles combine to produce a substance with different properties and how does thermal energy affect particles?” by building an understanding of what occurs at the atomic and molecular scale.
  - “What happens when new materials are formed? What stays the same and what changes?” by building an understanding of what occurs at the atomic and molecular scale during chemical reactions.
  - “How can one describe physical interactions between objects and within systems of objects?” by building an understanding of why some objects will keep moving, why objects fall to the ground, and why some materials are attracted to each other while others are not.
  - “How can energy be transferred from one object or system to another?” through four subcategories of definitions of energy, conservation of energy and energy transfer, the relationship between energy and forces, and energy in chemical process and everyday life.
  - “What are the characteristic properties of waves and how can they be used?” through three subcategories of investigation of wave properties, electromagnetic radiation, and information technologies and instrumentation

Parents/Families may assist their children by:

- visiting museums, aquariums, the Zoo, Missouri Botanical Gardens, the Science Center, the Magic House, Planetarium, going camping, participating in citizen science events, etc.
- creating a quiet study environment at home
- making sure they have all the necessary supplies
- reviewing completed homework and assignments
- checking the homework hotline on the school’s webpage

# Social Studies

## **American History - 8th Grade (M1800)**

American History Grade 8 covers Colonial America through the Civil War. Throughout this course students will analyze the causes and consequences of the European colonization of America and various patterns of migration. Using an inquiry lens, students will analyze the causes of the American Revolution along with the effects the colonists' victory had on the creation of our nation. The Constitution will be studied in depth to develop and answer compelling questions about the framework of our government. Students will analyze the struggles and challenges of a new government and a new nation while explaining the effects of westward expansion on the native inhabitants. The course will conclude with an in depth study of the causes and consequences of the Civil War.

### Course Objectives

- The student will interpret founding documents and reflect on their significance.
- The student will explore the causes and motivations for the colonization of America and study the impact on early colonial life.
- The student will analyze the causes, significant battles, and impact of the American Revolution.
- The student will research and evaluate the roots of the Constitution, the process for getting it ratified, and its lasting impact.
- The student will use an inquiry lens to analyze the causes and consequences of migration and forced migration and enslavement in the development of the United States of America.
- The student will use an inquiry lens, develop compelling questions, and consider multiple points of view regarding the causes of the Civil War, significant battles and strategy, outcomes, and lasting impact.
- The student will consider multiple points of the view regarding the causes and consequences of western expansion of the United States.
- The students will use primary source documents to infer meaning, perspective and personal insight using claim, evidence and reasoning in the context of American history up to 1870.

Parents/Families may assist their children by:

- establishing regular routines for completion of assignments and projects
- providing opportunities to learn about current events
- providing a local newspaper for reading, through traveling and listening to the news
- encouraging them to read and research about historically related topics
- modeling good citizenship

# Technology Literacy

## **Digital Information Technologies - Grade 8 (M8781)**

In Digital Information Technologies, students will explore their creative side while using video production and graphic design software to enhance visual and digital communication. They will use digital tools to create dynamic presentations while developing communication, problem-solving, programming and design, and leadership skills.

### Course Objectives:

- The student will use software applications to collaborate and create authentic products.
- The student will explore real-world examples of the legal and ethical issues of computer and internet use and sharing of personal digital information.
- The student will display effective written and visual digital communication skills.
- The student will conduct online research and evaluate sources to problem solve and acquire valid information across a variety of topics.

### Parents/Families may assist their children by:

- providing them with computer equipment
- having them practice keyboarding skills
- monitoring their Internet use
- stressing the importance of technology in our society
- supporting technology literacy programs in the school

# ***Elective Course Offerings***

## **Family and Consumer Sciences**

### **Introduction to Family and Consumer Sciences (M4701)**

This course promotes knowledge of child development, consumer skills, foods and nutrition, and the production of clothing and textiles through hands-on projects and real world applications. The student will complete a beginning level sewing project, develop food safety and nutrition skills, as well familiarity with basic child development.

Assessment for family and consumer science includes, but is not limited to, teacher-made tests, in-class recitations, assignments, projects, and presentations.

#### **Course Objectives**

- The student will describe the various aspects of developmental growth in children.
- The student will describe the roles and responsibilities when caring for children, especially safety issues.
- The student will examine and apply recommended guidelines for food safety, sanitation, and nutrition.
- The student will develop and practice basic food preparation methods.
- The student will investigate appropriate clothing care and repair.
- The student will practice basic sewing techniques and use basic sewing equipment safely.
- The student will explore career opportunities related to Family and Consumer Science.

### **Advanced Family and Consumer Sciences (M4703)**

This course builds on the skills and knowledge developed in the Introduction to FACS class. The student develops Family and Consumer Science knowledge through the application of intermediate level sewing projects and food labs. In addition to these practical living skills, the investigation of family dynamics and parenting roles will help prepare the student for future personal and professional experiences. (Prerequisites: Introduction to FACS or teacher approval) Assessment for family and consumer science includes, but is not limited to, teacher-made tests, in-class recitations, assignments, projects, and presentations.

#### **Course Objectives**

- The student will demonstrate meal planning principles and techniques based on standardized recipes to meet individual needs
- The student will demonstrate intermediate level food preparation methods and techniques for a variety of food categories
- The student will develop food safety and sanitation practices
- The student will examine and analyze how various elements, including family diversity, economics, birth order, education level, etc. influence family structure and dynamics.
- The student will identify the risks associated with adolescent parenthood
- The student will examine factors influencing family decisions
- The student will demonstrate basic skills of production, alteration, repair, and recycling of textiles, fashion, and apparel.

## **Food Careers (M4702)**

In this hands-on semester course, the student will be introduced into the world of professional cooking including training in safety and sanitation. The student will also analyze career paths within the food production and food service industries. The student will have the opportunity to develop their own food-based business model. (Prerequisites: Introduction to FACS or teacher approval)

Assessment for family and consumer science includes, but is not limited to, teacher-made tests, in-class recitations, assignments, projects, and presentations.

### **Course Objectives**

- The student will identify interests, aptitudes and skills necessary when exploring future careers through the completion of assigned activities, review techniques and career projects.
- The student will apply safe and sanitary food handling procedures.
- The student will demonstrate professionalism in class projects and food production.
- The student will perform basic math calculations for measuring, cost control and yields.
- The student will read about and demonstrate cooking methods and their application and impact on nutrition.
- The student will demonstrate the correlation of customer service and success in business.

Parents/Families may assist their children by:

- allowing them to contribute in the home and kitchen
- encouraging them to grow in their ability to follow technical directions
- encouraging hands-on creativity
- reviewing their portfolio periodically
- checking their planner and calling the homework hotline

# Performing Arts

## **Introduction to Music (M7750)**

Introduction to Music is a semester elective open to any middle school student, who is interested in making music. This course is appropriate for all levels of musicianship and explores vocal and instrumental music.

Music classroom-based assessment is curriculum-centered and standards-based. It focuses on content, process and participation at the middle school level. Music assessment includes teacher observations, anecdotal records and teacher-made quizzes.

### Course Objectives

- The student will be able to sing using appropriate vocal techniques.
- The student will be able to read standard notation.
- The student will be able to perform melodies on an instrument.
- The student will be able to perform a chordal and/or rhythmic accompaniment.
- The student will be able to create and perform a melody on an instrument.
- The student will be able to analyze and describe musical examples from various historical periods.

## **Middle School Beginning Band (M7660)**

Beginning Band is for the student in sixth through eighth grade who wishes to learn to play a traditional band instrument (flute, oboe, clarinet, saxophone, bassoon, trumpet, horn, trombone, baritone/euphonium, tuba, and concert percussion). No previous experience is necessary. This class addresses the gradual development of technical skills and good care of the band instrument, which eventually leads to the performance of simple band literature.

### Course Objectives

- The student will demonstrate basic technical skills of performance alone and in a group using teacher selected band literature.
- The student will perform with a characteristic tone on their instrument.
- The student will demonstrate basic care, maintenance, handling, and hygiene of the instrument.
- The student will count, perform, notate and improvise basic rhythmic patterns.
- The student will read standard notations and interpret basic symbols and vocabulary that conveys precise musical meanings.
- The student will accept feedback from peers and instructors on how to improve on skills.

## **Middle School Beginning Choir (M7761)**

Middle School Beginning Choir is a performing ensemble for the student who wants an aesthetic choral experience that involves the study of a wide variety of choral literature from various historical periods. The student studies vocal technique, music literacy, and performance skills. Through observing and listening to others, the student will develop their analysis and critical thinking skills. This choir participates in a variety of performances in the community.

Music classroom-based assessment is curriculum-centered and standards-based. It focuses on content, process and participation at the middle school level. Music assessment includes teacher observations, anecdotal records and teacher-made quizzes.

### Course Objectives

- Develop and apply singing skills to perform and communicate through the arts.
- Develop and apply the knowledge and skills to read and notate music.
- Develop and apply the knowledge and skills to analyze and describe music and musical performance.



### **Middle School Concert Choir (M7791M)**

Middle School Concert Choir is a performing ensemble for the student who desires an aesthetic choral experience that involves the study of a wide variety of advanced choral literature from various historical periods. The student studies advanced vocal technique, music literacy, and performance skills. Through observing and listening to others, the student will develop their critical thinking skills. This choir participates in concerts, choral festivals, competitions, and performances in the community.

Music classroom-based assessment is curriculum-centered and standards-referenced. It focuses on content, process and participation at the middle school level. Music assessment includes teacher observations, anecdotal records and teacher-made quizzes.

#### Course Objectives

- Develop and apply singing skills to perform and communicate through the arts.
- Develop and apply the knowledge and skills to read and notate music.
- Develop and apply the knowledge and skills to analyze and describe music and musical performance.
- Develop and apply the knowledge and skills to understand the relationships between music, the other arts and disciplines outside the arts.
- Develop and apply the knowledge and skills to understand works of art in the context of time and place.

### **Middle School Intermediate Band (M7670)**

Middle School Intermediate Band is for the middle school student who wishes to continue to learn to play their instrument. This class addresses the development of technical skills and good care of the band instrument, which eventually leads to the performance of band literature in an ensemble setting.

#### Course Objectives

- The student will demonstrate intermediate technical skills of performance alone and in a group using teacher selected band literature.
- The student will perform with a characteristic tone on their instrument.
- The student will demonstrate common care, maintenance, handling, and hygiene of the instrument.
- The student will count, perform, notate and improvise intermediate rhythmic patterns.
- The student will read standard notations and interpret intermediate symbols and vocabulary that conveys precise musical meanings.
- The student will accept feedback from peers and instructors on how to improve on skills.

### **Middle School Advanced Band (M7680)**

Middle School Advanced Band is for the middle school student who wishes to continue to learn to play their instrument. This class addresses the further development of technical skills and good care of the band instrument, which eventually leads to the higher level performance of band literature in an ensemble setting.

#### Course Objectives:

- The student will demonstrate advanced technical skills of performance alone and in a group using teacher selected band literature.
- The student will perform with a characteristic tone on their instrument.
- The student will demonstrate common care, maintenance, handling, and hygiene of the instrument.
- The student will count, perform, notate and improvise advanced rhythmic patterns.
- The student will read standard notations and interpret advanced symbols and vocabulary that conveys precise musical meanings.
- The student will accept feedback from peers and instructors on how to improve on skills.

## **Middle School String Orchestra (M7640)**

Middle School String Orchestra is a continuum. At one end is dependence and at the other independence. Middle School String Orchestra classes work to develop musicians who will be able to perform in a high school ensemble. This course will continue to emphasize learning to play with steady pulse, note reading from basic to more complex, rhythm reading from basic to more complex, bowing techniques, shifting, expressive musical terms, intonation, and learning to play in an ensemble. Emphasis will continue to reinforce the fundamentals of good posture and playing skills.

### Course Objectives

- The student will demonstrate proper playing posture and position.
- The student will perform rhythms ranging from basic to more complex.
- The student will develop bowing technique to produce appropriate dynamics, expressive markings, and tone.
- The student will develop basic vibrato technique.
- The student will learn how to read basic to more complex music notation and expressive markings.
- The student will develop and discern intonation. Students will learn how to play with alternative fingerings (shifting).
- The student will demonstrate adequate skills of performing in an ensemble. demonstrate audience behavior appropriate for the context and style of music performed with 80% accuracy.

## **Middle School Theatre Arts (M7101)**

The student in Theatre Arts will develop performance and presentation skills and will examine various aspects of modern and improvisational theatre. The student will view performances and have the opportunity to attend live performances. This class can be taken and repeated multiple times; it will be modified to meet student needs.

### Course Objectives

- The student will practice aspects of performance on a daily basis.
- The student will collaborate with classmates to develop a public performance piece.
- The student will read scripts and view performances.
- The student will have opportunities to create performances and make connections to the principal components of theatre.
- The student will visit a performing arts venue.

### Parents/Families may assist their children by:

- providing opportunities for them to see and hear live musical and theatre performances that are appropriate for their age.
- encouraging them to practice at home on a regular basis.
- providing a quiet place for them to practice at home.
- providing them with a quality musical instrument that is in good playing condition.
- encouraging their ongoing progress along with attending their concerts/performances.
- chaperoning music field trips.
- teaching the importance of respecting school property, their instrument and other student's instruments.
- discussing appropriate behavior at various musical and theatre events.

## Project Lead the Way (PLTW)

### **App Creators (M5018M)**

Students learn and apply computational thinking and technical knowledge and skills to create mobile applications. Students also acquire and apply skills pertaining to the design process, problem solving, persistence, collaboration, and communication.

#### Course Objectives

- The student will be introduced to pair programming, app development, and the MIT App Inventor development tool.
- The student will learn about the Model-View-Controller design pattern, app graphical design, event-driven programming, debugging, and algorithm creation using variables and conditional logic.
- The student will create apps and interactive games using interface features, media, and animation.
- The student will create algorithms using loops and create procedures to abstract the details of a task and reduce redundancy.
- The student will design and create a mobile app solution for a personal or community problem.

### **Automation and Robotics (M5002)**

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

#### Course Objectives

- define automation and robotics and describe their purposes
- research the history of automation and robotics and summarize their impact on society
- use equations to solve real-life problems
- understand and apply mechanics to solve real-world problems
- understand and design a variety of systems
- make predictions and problem solve potential malfunctions

### **Computer Science for Innovators and Makers (M5019M)**

Students learn about programming for the physical world by blending hardware design and software development. Using micro-controllers with inputs and outputs, they develop code that brings their physical designs to life.

#### Course Objectives:

- The student will use block-based code to create, download, and upload programs to the micro:bit micro-controller.
- The student will learn processes and skills to debug programs.
- The student will create their own input device to interact with a program they will develop on a micro-controller.
- The student will work as a team to apply physical computing knowledge and skills to design and create one of three problem options.
- The student will collaborate and solve authentic problems using communication, math, and science skills.

## **Design and Modeling (M5004)**

Students apply the design process to solve problems and understand the influence of creativity and innovation on their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

### Course Objectives

- understand and apply the steps used in the design process
- apply engineering notebook standards and protocols when documenting work as assessed by student activities and engineering notebook
- take accurate measurements and make conversions
- utilize sketching and dimensioning techniques to create a variety of designs and to communicate ideas
- design and create CAD modeled parts and assemble a product using the CAD modeling program
- work cooperatively and effectively with a team

## **Green Architecture (M5001)**

Today's student has grown up in an age of "green" choices. The student learns how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's 3D architectural design software.

### Course Objectives

- The student will investigate green architecture as assessed by class discussion, activities, and presentations.
- The student will use equations to solve real-life problems as assessed by tests, activities, projects, and presentations.
- The student will explain sustainable architecture as assessed by activities, projects, and presentations.
- The student will demonstrate knowledge of measurement, construction, and design as assessed by projects and presentations.

## **Medical Detectives (M5003)**

The student plays the role of a real-life medical detective as they analyze genetic testing results to diagnose disease and study DNA evidence found at a "crime scene". They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

### Course Objectives

- The student will utilize the skills of a medical detective as assessed by class discussion, activities, and presentations.
- The student will evaluate real-life case files to diagnose illness as assessed by tests, activities, projects, and presentations.
- The student will explain the mysteries of the human body systems as assessed by activities, projects, and presentations.
- The student will determine a cause of death from a murder mystery using physical evidence, DNA, and autopsy reports as assessed by activities, projects, and presentations.

Parents/Families may assist their children by:

- encouraging them to review ideas and concepts discussed in class
- visiting sites such as code.org participating in coding events
- going to maker faires and innovative centers throughout St. Louis
- participating in STEM clubs and activities for families throughout the region
- tinkering at home
- encouraging a growth mindset
- asking questions and trying to find solutions

# Technology and Engineering

## Design Lab (M4802)

This course provides a general groundwork for best practices within the industrial design field. The student will develop techniques for brainstorming, design development, presentation and problem solving, as well as hands-on creation of student designs/prototypes. (Prerequisites: Woodworking and Metalworking or teacher approval) Assessment includes teacher-made tests, in-class assignments, projects and presentations.

### Course Objectives

- The student will practice safety protocols in the technical classroom.
- The student will reinforce specific knowledge including measurement, reading and developing plans, and tool use from woodworking and metalworking through practice and reflection in an action-oriented setting.
- The student will develop competence and confidence with a set of tools and methods for product design and development.
- The student will develop awareness of the role of multiple functions in creating a new product (design, engineering, production).
- The student will coordinate multiple, interdisciplinary tasks in order to achieve a common objective.
- The student will develop enhanced team working skills.

Parents/Families may assist their children by:

- encouraging them to review ideas and concepts discussed in class
- subscribing to age-appropriate industrial/technical magazines and encouraging them to read these materials or by visiting their local library
- spending time with them measuring small items to the nearest 1/16"
- discussing and shopping for home improvement items
- reinforcing step-by-step procedures
- helping them to understand the importance of safety rules and regulations
- encouraging the use of technology to gather data

## Introduction to Technical Careers (M4803)

The student will be exposed to a variety of high-demand careers in the technical industry, including electrical, plumbing, carpentry, and remodeling. The student will have the opportunity to research and practice hands-on skills. (Prerequisites: Woodworking and Metalworking or teacher approval) Assessment includes teacher-made tests, in-class assignments, projects and presentations.

### Course Objectives

- The student will learn and apply safety protocols in the technical classroom.
- The student will identify and utilize a variety of tools and measurement skills specific to technical careers addressed in the course.
- The student will research a variety of technical careers and will present their research in written and oral formats
- The student will read and analyze technical plans.
- The student will participate in a group construction project.

## **Woodworking and Metalworking (M4801)**

In Woodworking and Metalworking, the student will be introduced to real-world life and job skills to enable the student to create projects and solve problems. The student will become well acquainted with the tools, methods and techniques involved in working with materials. The student will have the opportunity to work with both woods and metals, as well as develop math and communication skills. Areas of study will include safety, layout, hand tools, and power tools. Assessment includes teacher-made tests, in-class assignments, projects and presentations.

### Course Objectives

- The student will learn and apply safety protocols in the technical classroom.
- The student will read and develop plans for creating projects.
- The student will use measurement, hand, and power tools to construct projects.
- The student will utilize basic mechanical drawing tools to create simple, multi-view drawings.
- The student will demonstrate the ability to finish projects involving sanding, painting, filing, staining, and finishing.

# Visual Arts

## Introduction to Art (M7503)

The student in Introduction to Art will explore painting, sculpting, printmaking, drawing, design, mixed-media, and ceramics (clay). This course will provide the opportunity to apply the elements and principles of design as well as strengthen skills in critiquing, interpreting, and discussing works of art.

### Course Objectives

- The student will produce art in the areas of drawing, painting, sculpture, ceramics, and printmaking.
- The student will understand and apply the elements of art.
- The student will understand and apply the principles of design.
- The student will explore and develop an understanding of the role of art in the world, various art styles, and historical periods or cultures.
- The student will critique and interpret works of art.

## 2-Dimensional Art (M7501)

The student in 2-D Art will explore drawing, painting, printmaking, and design. This course will provide the opportunity to apply the elements and principles of design as well as strengthen skills in critiquing, interpreting, and discussing works of art. (Prerequisites- Introduction to Art or teacher approval)

### Course Objectives

- The student will produce art in the areas of drawing, painting, design, and printmaking.
- The student will understand and apply the elements of art.
- The student will understand and apply the principles of design.
- The student will explore and develop an understanding of the role of art in the world, various art styles, and historical periods or cultures.
- The student will critique and interpret works of art.

## 3-Dimensional Art (M5702)

The student in 3-D Art will explore sculpture, ceramics (clay), and design. This course will provide the opportunity to apply the elements and principles of design as well as strengthen skills in critiquing, interpreting, and discussing works of art. (Prerequisites: Introduction to Art or teacher approval)

### Course Objectives:

- The student will produce art in the areas of sculpture, ceramics, and design.
- The student will understand and apply the elements of art.
- The student will understand and apply the principles of design.
- The student will explore and develop an understanding of the role of art in the world, various art styles, and historical periods or cultures.
- The student will critique and interpret works of art.

### Parents/Families may assist their children by:

- providing opportunities for them to visit museums and galleries
- asking them to share what they are learning in art class
- providing them with basic art supplies and materials
- stressing the importance of elective courses in students' academic development
- encouraging them to complete assignments in a timely manner and to the best of their ability

## **Studio Art (M7510)**

Students will choose which 2D or 3D media and materials they will explore and use to create art. Students will plan, research, experiment, and develop ideas to build their own projects. Media can include but is not limited to drawing, painting, printmaking, ceramics, sculpture, and fibers. (Prerequisites: Intro to Art and 2-D or 3-D)

Course Objectives:

- The student will conceive and develop new artistic ideas and work
- The student will Interpret and share artistic work
- The student will understand and evaluate how the arts convey meaning
- The student will relate artistic ideas and work with personal meaning and external context.

Parents/Families may assist their children by:

- providing opportunities for them to visit museums and galleries
- asking them to share what they are learning in art class
- providing them with basic art supplies and materials
- stressing the importance of elective courses in students' academic development
- encouraging them to complete assignments in a timely manner and to the best of their ability



# World Languages and Cultures

## Exploring World Languages and Cultures (M1605)

Students in Exploring World Languages and Cultures will be introduced to the French, Spanish and German cultures and languages. Students will experience language through the use of basic phrases and simple conversations in French, German and Spanish and will engage in French, Spanish and German cultures by exploring traditions and lifestyles (including holidays, food, local practices, and geography) through interactive activities. Through participation in this course, students will be able to make informed decisions in selecting languages for further study.

### Course Objectives

- The student will explore the concept of culture including traditions and lifestyles of French-, German-, and Spanish-speaking countries.
- The student will connect geography of the world to the perspectives and practices of the various French-, German-, and Spanish-speaking countries and cultures.
- The student will comprehend and use basic pleasantries and daily phrases to express personal information (such as preferences and feelings).
- The student will engage in simple conversations with peers to practice basic vocabulary (such as greetings and travel phrases).

## Investigating a World Language (French, German or Spanish) (M6501)

Students in Investigating a World Language will experience a new language through conversation, vocabulary and culture and engage in cultural activities that allow them to expand their global interests. Students will connect topics like food and family to their own lives, learn basic conversational phrases (including preferences) and explore the geography and lifestyles of the target language. Students will be able to have short conversations in the target language to gain confidence in speaking with others. This course is recommended for students planning to continue studying a World Language in 8th grade or High School. (The target language may vary based on teacher certification).

### Course Objectives

- The student will comprehend and present basic information about self, likes and dislikes, and every day activities using practiced or memorized words and phrases.
- The student will request and provide basic information by asking and answering a few simple questions on very familiar and everyday topics, using a mixture of practiced or memorized words and phrases.
- The student will express and react to basic needs and preferences related to familiar and everyday activities, using a mixture of practiced or memorized words and phrases in simple conversation.
- The student will research and identify typical products and practices related to everyday life with respect to their own and other cultures.

Parents/Families may assist their children by:

- encouraging them to practice their language
- asking them if they have completed assignments and homework
- making sure they are practicing current Spanish vocabulary and verb lists (flash cards are very helpful)
- asking them about completion of their daily in-class journal for Spanish language and culture
- having them bring their textbook home when they need to study
- helping them with drills for weekly quizzes and tests
- looking for opportunities for them to experience the culture of foreign countries, exhibits, films, theatrical performances and vacations

# ***Additional Curriculum Offerings***

## **English Learners**

### **Introduction to the English Language**

The Introduction to the English Language course is intended to support English Language acquisition in the areas of academic language and disciplinary content vocabulary and context. The course is designed for the non-native English speaker testing at the beginning level of English proficiency. Students will practice oral fluency as well as reading and writing skills.

Course Objectives:

- The student will communicate for social and instructional purposes within the school setting.
- The student will communicate information, ideas and concepts necessary for academic success in the content area of language arts.
- The student will communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
- The student will communicate information, ideas and concepts necessary for academic success in the content area of science.
- The student will communicate information, ideas and concepts necessary for academic success in the content area of social studies.
- The student will engage in academic research in English on various topics in the content areas.
- The student will read, discuss, and analyze texts in English in the content areas.
- The student will write and respond to texts in the content areas.
- The student will discuss content specific topics and orally present information to an audience.

### **Gifted (STRETCH)**

The middle school gifted curriculum continues to incorporate the core curricular areas as an instructional foundation. Activities for the students in sixth, seventh and eighth grades are designed to continue challenging higher level thinking skills, problem-solving techniques, creativity, research skills and to promote an understanding of self, others and the world. Opportunities in contests and competitions continue to stimulate achievement in a wider variety of areas. Gifted students have opportunities to explore a wide range of topics, thus encouraging life-long learning. In order to correctly identify as many gifted students as possible, a uniform multi-criteria screening process is necessary. The following battery of tests and inventories are used in accordance with state guidelines to determine eligibility for gifted education:

- Ability Tests
- Achievement Tests
- Creativity Tests
- Parent and teacher surveys of student behaviors and characteristics

Course Objectives

- apply higher level research skills and utilize a variety of resources to develop a knowledge base for use in product development
- utilize the higher level thinking skills of analysis, synthesis and/or evaluation
- demonstrate the necessary skills to recognize and solve a problem
- exhibit the creative thinking skills of fluency, flexibility, originality and elaboration on written, oral and/or visual presentations
- gain self-awareness and develop interpersonal skills

Parents/Families may assist their children by:

- watching the news together and discussing current events
- encouraging them to take a chance on a new activity
- reading and discussing the novels they are reading for gifted class
- visit museums, art galleries, educational institutions, historical places, etc.

Recommended reading for parents:

- "Guiding the Gifted Child" by James T. Webb, Ph.D., Elizabeth Meckstroth, M.S.W. and Stephanie S. Tolan, M.A.
- "When Gifted Kids Don't Have All the Answers" by Jim Delisle, Ph.D. and Judy Galbraith, M.A.
- "Teaching Gifted Kids in the Regular Classroom" by Susan Winebrenner

## **Guidance and Counseling**

The Mehlville School District's Guidance and Counseling Department offers eighth grade students an opportunity to develop skills in exploring and planning for school and careers, making decisions, understanding and getting along with others, improving study and learning skills, understanding the effects of drugs and alcohol and learning from others about high school.

Course Objectives:

- acquire effective note taking strategies
- develop practical test taking skills
- review their personal Aspire test results and match interests and abilities to career choices
- select a personal career path for occupational exploration
- identify and explore a variety of resources to aid in career exploration and planning
- demonstrate the ability to make good decisions concerning drugs and alcohol
- describe how to make a good decision
- identify practices for resolving conflicts

Parents/Families may assist their children by:

- encouraging them to seek adult help when necessary
- modeling appropriate behaviors, including good listening skills
- stressing the need for following school rules and those of society
- affirming their children on a daily basis
- discussing special interests
- maintaining effective communication with the school

## **Library Media**

In support of district curriculum, the Library Media Center provides student access to technology and information in a variety of formats.

Assessment includes librarian and teacher observations of student skills and performances. Teacher-assigned projects are used as assessments.

Course Objectives

- The student will demonstrate knowledge of resources available in the library.
- The student will determine information needed and effectively utilize materials necessary to meet any class assignment or personal interest.
- The student will follow guidelines regarding proper use of materials.
- The student will participate in the research process by evaluating the accuracy, appropriateness and effectiveness of available information.
- The student will independently read a variety of materials for information or personal interest.

Parents/Families may assist their children by:

- visiting the public library with them
- setting an example by checking out materials from the library
- becoming familiar with the electronic catalog and library resources
- reading with them
- asking them about books they are reading

## **Special Education**

Special School District (SSD) provides special education and related services for students with educational disabilities in the Mehlville School District. In collaboration with partner districts, Special School District provides technical education and a wide variety of individualized educational and support services designed to ensure the student's successful contribution to our community.

If you suspect that your child may have an educational disability and require an evaluation for special education, you should contact your child's teacher, school counselor, or principal.

# Websites to Help Your Child in School

Prior to publication of this document, each site below was checked for appropriateness. The Mehlville School District is not responsible for any content or advertisements housed/published on these sites.

## [Discovery Education Homework Help \(K-12\)](#)

*Contains over 700 homework links*

## [Basic Steps in the Research Process \(7-12\)](#)

## [How to Study \(5-12\)](#)

*Tips on test taking, note taking, managing study time, building vocabulary and more*

## [Research Skills](#)

*Help with choosing a research topic and steps in the writing process*

## [Homework Helper Ref Desk \(K-12\)](#)

*Links to subjects organized by grade level*

## [Kid Info \(2-12\)](#)

*Homework site for students, teachers and parents*

## [Jiskha Homework Help \(3-12\)](#)

*Virtual encyclopedia of facts and figures*

## [Fact Monster \(3-12\)](#)

*All subjects; games, quizzes, homework center and more*

## [The History Place \(5-12\)](#)

*How to write a better history paper*

## [Homework Center](#)

## [Info Please](#)

*Reference materials and homework help in various subjects*

## [Web Math](#)

*Interactive homework help in pre-algebra, algebra, geometry, trigonometry, calculus, statistics and real-world math*

## [A+ Math \(3-12\)](#)

*Helps students improve math skills with flashcards, games, worksheets and homework help*

## [First Gov for Kids \(K-12\)](#)

*U.S. government site that provides links that cover a variety of topics*

## [Ben's Guide to US Government \(K-12\)](#)

*Government resources for students, parents and teachers*

## [High School Ace \(9-12\)](#)

*Academic homepage for high school students*

## [Education Resources \(K-12\)](#)

*Practice in all subject areas at all levels*

## [4 Kids](#)

*Weekly articles and links demonstrating how online learning can be a safe, fun and adventurous activity*

[Kids Health](#)

[President's Council on Sports, Fitness and Nutrition](#)

*Health and Fitness*

[Nutrition](#)

*A user-friendly nutrition site with games, activities and posters for students and adults*

## World Book Online Web

World Book Online, a grade-appropriate research tool that includes encyclopedias, multimedia, eBooks, and primary source databases is available to Mehlville students both at school and at home. The online reference tool developed by education experts also includes a time-line builder, citation builder, individual research accounts, a translation tool generating content in thirty languages, text-to-speech feature, video tutorials, interactive activities, magazine articles, newspapers and the following databases:

- World Book Kids – encyclopedia for elementary school students age 7 and up
- World Book Student – encyclopedia for middle school and high school students age 11 and up
- World Book Advanced – encyclopedia for high school and college students age 13 and up
- Living Green – online interactive site that examines causes of pollution and offers tips on green practices
- Early Peoples – online interactive site that examines history of ancient cultures
- Inventions and Discoveries – online, interactive site that examines inventions and discoveries
- Dramatic Learning – uses plays, skits and monologues to help students become more fluent readers and help them understand core concepts and retain information
- Early World of Learning – narrated stories, interactive games and reference materials to help young learners

To Access World Book Online:

- Go to <http://mehlvilleschooldistrict.com>
- Select Parents/Students
- Select Library Resources
- Go to World Book Online

World Newspapers: Located on the upper left side of the World Book Advanced home page is Research Tools. Within the Research Tools is World Newspapers which provides newspapers from the United States and around the world.

To access a newspaper:

- Select World Newspapers on the World Book Advanced home page
- Choose a location from around the world
- Click GO