

Mid-Prairie Virtual Academy
Middle School Course Catalog



Math

[Math 6 A/B](#)

This semester-long middle school course will provide students with a deep understanding and mastery of the objectives that will prepare them for algebra. It is aligned to Common Core State Standards, and is based on best practices in the teaching of mathematics and the disciplines of STEM learning. Students will develop 21st century skills as they master ratios and proportional relationships; the number system; and number visualization.

[Math 7 A/B](#)

Math 7 builds on material learned in earlier grades, including fractions, decimals, and percentages and introduces students to concepts they will continue to use throughout their study of mathematics. Among these are surface area, volume, and probability. Real-world applications facilitate understanding, and students are provided multiple opportunities to master these skills through practice problems within lessons, homework drills, and graded assignments.

[Math 8 A/B](#)

This course is designed to enable all students at the middle school level to develop a deep understanding of math objectives and leaves students ready for algebra. The first semester covers objectives in transformations, linear equations, systems of equations, and functions. The second semester focuses on scientific notation, roots, the Pythagorean Theorem and volume, and statistics and probability. The course is based on the Common Core State Standards Initiative and on a modern understanding of student learning in mathematics.

English Language Arts

[English 06 A/B](#)

This course provides a strong foundation in grammar and the writing process. It emphasizes simple but useful composition and language mechanics strategies with multiple opportunities for modeling practical, real-world writing situations that will enable students to improve their written communication skills quickly. Through a variety of grade-appropriate reading selections, students develop a clear understanding of key literary genres and their distinguishing characteristics.

English 07 A/B

English 7 Integrates the study of writing and literature through the examination of a variety of genres. Students identify the elements of composition in the reading selections to understand their function and effect on the reader. Practice is provided in narrative and expository writing. Topics include comparison and contrast, persuasion, and cause and effect essays, as well as descriptive and figurative language. Lessons are supplemented with vocabulary development, grammar, and syntax exercises, along with an introduction to verbal phrases and research tools.

English 08 A/B

Extends the skills developed in English 7 through detailed study of parts of sentences and paragraphs to understand their importance to good writing. Students also acquire study skills such as time management and improved test-taking strategies. Other topics include punctuation, word choice, syntax, varying of sentence structure, subordination and coordination, detail and elaboration, effective use of reference materials, and proofreading.

Social Studies

Middle School World History A/B - 6th Grade

In Middle School World History, learners will study major historical world events from early human societies through to the present day. Multimedia tools including custom videos as well as videos from the BBC, custom maps, and interactive timelines will help engage learners as they complete this year-long course. They will explore the development of early humans and early civilizations. They will be introduced to the origins of major world religions, such as Hinduism and Buddhism. Also, learners will study the medieval period. Historical thinking and geography skills will be taught and utilized throughout the course.

Contemporary World A/B - 7th Grade

The Contemporary World is a year-long course designed to strengthen learners' knowledge about the modern world. Multimedia tools including custom videos as well as videos from the BBC, custom maps, and interactive timelines will help engage learners as they complete this course. Learners will explore the importance of geography, the influence of culture, and the relationship humans have with the physical environment. They will also focus on the responsibility of citizens, democracy in the United States, U.S. legal systems, and the U.S. economy. Ultimately, learners will complete this course as global citizens with an understanding of how to help and better their community and the world.

Middle School U.S. History A/B - 8th Grade

In Middle School U.S. History, learners will explore historical American events with the help of innovative videos, timelines, and interactive maps and images. The course covers colonial America through the Reconstruction period. Learners will develop historical thinking and geography skills, which they will use throughout the course to heighten their understanding of the material. Specific topics of study include the U.S. Constitution, the administrations of George Washington and John Adams, the War of 1812, and the Civil War.

Civics A/B

Interactive, problem-centered, and inquiry-based, each unit in Civics emphasizes the acquisition, mastery, and processing of information. Every unit features both factual and conceptual study questions. Instructional strategies include Socratic instruction, student-centered learning, and experiential learning. Topics covered range from Basic Concepts of Power and Authority and National Institutions of Government to analyses of society and citizenship.

World Geography A/B

In an increasingly interconnected world, equipping students to develop a better understanding of our global neighbors is critical to ensuring that they are college and career ready. These semester-long courses empower students to increase their knowledge of the world in which they live and how its diverse geographies shape the international community. Semester A units begin with an overview of the physical world and the tools necessary to exploring it effectively. Subsequent units survey each continent and its physical characteristics and engage students and encourage them to develop a global perspective.

Science

Science 6 with Virtual Labs A/B

Science 6 with Virtual Labs is an integrated science course based on the Next Generation Science Standards (NGSS). The content covers all three dimensions incorporated by NGSS: disciplinary core ideas, science and engineering practices, and crosscutting concepts. Semester A focuses on basic physical science and earth and space science. Semester B focuses on the history of the Earth, ecosystems, and weather and climate. In this course, students complete teacher-graded labs in the Course Activities and Unit Activities. This version of Science 6 has been designed so that all labs are virtual. Students will still be able to plan and execute investigations through carefully designed simulations and videos. They will also be able to design experimental setups and analyze data and visuals derived from real-world experiments.

Science 7 with Virtual Labs A/B

Science 7 with Virtual Labs is an integrated science course based on the Next Generation Science Standards (NGSS). The content covers all three dimensions incorporated by NGSS: disciplinary core ideas, science and engineering practices, and crosscutting concepts. Semester A focuses on cells, the life cycle, and nutrition. Semester B focuses on chemical reactions, force fields, and energy. In this course, students complete teacher-graded labs in the Course Activities and Unit Activities. This version of Science 7 has been designed so that all labs are virtual. Students will still be able to plan and execute investigations through carefully designed simulations and videos. They will also be able to design experimental setups and analyze data and visuals derived from real-world experiments.

Science 8 with Virtual Labs A/B

Science 8 with Virtual Labs is an integrated science course based on the Next Generation Science Standards (NGSS). The content covers all three dimensions incorporated by NGSS: disciplinary core ideas, science and engineering practices, and crosscutting concepts. Semester A focuses on genes, evolution, and the Earth's energy. Semester B focuses on Earth's changing climate, waves, and human impact on the Earth. In this course, students complete teacher-graded labs in the Course Activities and Unit Activities. This version of Science 8 has been designed so that all labs are virtual. Students will still be able to plan and execute investigations through carefully designed simulations and videos. They will also be able to design experimental setups and analyze data and visuals derived from real-world experiments.

Earth and Space Science A/B

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with middle school Earth and space science. Content topics include Earth and space systems and interactions, the history of the Earth, the Earth's systems, weather and climate, climate change, and human impacts on the Earth. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences, as defined by the National Research Council (2006, p. 3). Lab materials note: All hands-on labs employ relatively-common household materials. Please refer to the Student Syllabus or Teacher's Guide for details on lab materials.

Life Science A/B

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with middle school life science. Content topics include cells and human body systems, structure and functions of living organisms, genes and adaptations, evolution, energy flow in ecosystems, and interdependence of ecosystems. Each lesson includes one or more inquiry-based activities that can be performed

online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences. Lab materials note: All hands-on labs employ relatively-common household materials. Please refer to the Student Syllabus or Teacher’s Guide for details on lab materials.

Physical Science A/B

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with middle school physical science. Content topics include structure and properties of matter, chemical reactions, forces and motion, force fields, energy, and waves. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences. Lab materials note: All hands-on labs employ relatively-common household materials.

Career & Technical Education

Electronic Communication Skills

This semester-long course is based on Career and Technical Education (CTE) standards to help students prepare for entry into a wide range of careers and/or into postsecondary education. It is designed to enable students at high school level to develop electronic communication skills that they can use in their careers.

Essential Career Skills

This course helps students understand and practice critical life and workplace readiness skills identified by employers, state boards of education, and Advance CTE. These skills include personal characteristics, such as positive work ethic, integrity, self-representation, and resourcefulness, as well as key people skills, communication skills, and broadly-applicable professional and technical skills. These skills are universally valuable but sometimes assumed or glossed over in more career-specific courses. For that reason, this provides students with a solid foundation in their career studies.

Principles of Agriculture, Food, & Natural Resources A/B

Throughout this course, your students will learn about various career options in the agriculture, food, and natural resources industries. They will learn about technology, safety, and regulatory issues in agricultural science. They will also learn about some topics related to agriculture, such as

international agriculture and world trade, sustainability, environmental management, research, development, and future trends in the industry. The course helps students navigate the rising demand for sustainable food sources while also meeting the challenge of producing higher yields to feed a growing world.

[Principles of Architecture and Construction](#)

This interactive course empowers students with the knowledge to appreciate and evaluate career opportunities in architecture and construction. With an emphasis on developing critical thinking skills, this one-semester course includes a variety of activities as students learn about structures and loads, materials and costs, urban design, and other aspects of these fascinating career opportunities. This easy-to-manage course will help build a solid foundation for their career options.

[Principles of Arts, Audio/Video Technology, & Communications A/B](#)

This course appeals to your students' familiarity with a variety of sensory inputs and stimulus. With an emphasis on visual arts, the 14 lessons introduce learners to careers in design, photography, performing arts, fashion, and journalism, among others. This engaging course covers inherently engaging topics that will stimulate your students as they consider careers in which the arts, technology, and communications intersect.

[Principles of Business, Marketing, & Finance A/B](#)

This course has a broad application for almost every career path that your students might choose. This course supplies both essential career skills and life skills. Designed for early high school students, the course offers you the flexibility to customize it to the unique needs of your program and your students. Interactive games and other engaging online and offline activities make practical real-life application of essential business principles understandable useful in the daily lives of your students and in the careers that they choose.

[Principles of Engineering & Technology A/B](#)

This easy-to-manage course provides students with essential STEM knowledge and an effective overview of STEM careers. The course's 15 lessons are interspersed with activities and online discussions that engage learners and promote understanding and achievement. Topics covered include biotechnology, mechanics, and fluid and thermal systems. The concluding lesson provides a valuable overview of the overall engineering design process.

[Principles of Health Science A/B](#)

With an engaging and interactive instructional approach, this rigorous course provides your students with a comprehensive overview of health science topics and careers. Health science professionals are in increasing demand and of increasing interest, and this semester-long course is an effective way to introduce students to the wide array of health science careers. Beginning with

medical terminology, the course includes an overview of physiology and human homeostasis and more.

[Principles of Information Technology A/B](#)

Building on the fundamentals learned in Information Technology 1A, this course takes the next steps in preparing learners for a career in information technology. Covering software, hardware, and implementation topics, the course also addresses the security and ethical issues that your students will face in an IT career. Combining lessons, online and offline activities, and interactive discussions, the course will provide a practical yet cutting edge look at the issues faced by leading IT professionals today and in the future.

World Languages

[French 1 A/B](#)

These courses are based on a researched scope and sequence that covers the essential concepts of French. Class discussions provide an opportunity for discourse on specific topics in French. A key support tool is the Audio Recording Tool that enables students to learn a critical skill for French: listening and speaking. Beginning with learning personal greetings and continuing through practical communications exchanges, French 1B introduces students to the skills necessary to make the most of traveling to French-speaking countries.

[French 2 A/B](#)

Each of these semesters is designed to build on the principles mastered in French 1 and use a combination of online curriculum, electronic learning activities, and supporting interactive activities to fully engage learners. Unit pretests, post-tests, and end-of-semester tests identify strengths and weaknesses, helping to create a more personalized and effective learning experience. As with French 1, these 90-day courses emphasize practical communication skills while also building intercultural awareness and sensitivity.

[Spanish 1 A/B](#)

Spanish is the most spoken non-English language in U.S. homes, even among non-Hispanics, according to the Pew Research Center. There are overwhelming cultural, economic, and demographic reasons for students to achieve mastery of Spanish. Spanish 1A and B engage students and use a variety of activities to ensure student engagement and to promote personalized learning. These courses can be delivered completely online, or implemented as blended courses, according to the unique needs of the teacher and the students.

Spanish 2 A/B

Spanish 2A and B utilize three assessment tools that are designed specifically to address communication using the target language: Lesson Activities, Unit Activities, and Discussions. These tools help ensure language and concept mastery as students grow in their understanding and use of Spanish. Learning games specifically designed for language learning are used and can be accessed on a wide variety of devices.

Family & Consumer Science

Family & Consumer Science prepares students with a variety of skills for independent or family living. Topics covered include child care, home maintenance, food preparation, money management, medical management, clothing care, and more. They also focus on household, personal, and consumer health and safety. In addition, students learn goal setting and decision-making skills, as well as explore possible career options.

Health & Fitness

Fitness Basics 1

This course provides students with a basic understanding of fitness and nutrition. Students will learn about exercise safety, team and individual sports, nutrition, and the importance of staying active throughout their lifetime. Students conduct fitness assessments, set goals, develop their own fitness program, and participate in weekly physical activity.

Middle School Health

Middle School Health aids students in creating a foundation of personal health. Beginning with properly defining health, this course then builds upon basic health practices to emphasize the importance of balance. Attention is given to each of the six dimensions of wellness; namely, physical, intellectual, emotional, spiritual, social, and environmental. Students are taught the skills necessary to improve every aspect of health. They are also encouraged to reflect upon their own personal wellness each week.

Middle School Career Explorations

What career are you best suited for? In this course, students will explore career options in many different fields including business, health science, public administration, the arts, and information technology.

Middle School Journalism

Who? What? When? Where? Journalism provides us with the answers to these questions for the events that affect our lives. In this course, students will learn how to gather information, organize ideas, format stories for different forms of news media, and edit their stories for publication. The course will also examine the historical development of journalism and the role of journalism in society.

Middle School Photography: Drawing with Light

"A picture is worth a thousand words." Photographs play an important role in our world today. We photograph to preserve memories, document events, and create artistic works. This course introduces students to the basics of photography, including camera functions and photo composition. Students will learn what it takes to create a good photograph and how to improve photographs of animals, people, and vacations. They will also begin working with their photographs using photo-editing software. Through a variety of assigned projects, students will engage their creativity by photographing a range of subjects and learning to see the world through the lens of their cameras.