

Missouri Course Access and Virtual School Program (MOCAP)
Course Descriptions-R7 Online Academy

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KINDERGARTEN ART

Kindergarten art students will explore a variety of art materials and be introduced to artists from all over the world and throughout history. Students will learn about and apply their knowledge of the elements of art through art-making.

KINDERGARTEN MATH

The kindergarten math course offers students a variety of learning experiences focusing on whole numbers, shape, and space. Students learn number names, the count sequence, count objects, compare numbers, and build an understanding of place value. Problem solving is introduced as students explore addition as putting together/adding to, and subtraction as taking apart/taking from. Students also experience activities in which they identify, sort, study patterns in, and relate mathematical figures to objects within their environment.

KINDERGARTEN MUSIC

This course offers a variety of learning experiences that include vocal exploration, singing, improvisation, movement, listening activities and composition. Throughout the course, students will learn grade level appropriate music vocabulary and be able to apply it in singing or while listening to music. Students will explore music opposites such as fast and slow (tempo), loud and soft (dynamics), steady or not steady (beat), high and low (pitch), up and down (pitch/melody), long and short (rhythm), same and different (patterns), sound and silence (rhythm), smooth and separated (style and expression) and jog and gallop (meter).

KINDERGARTEN PHYSICAL EDUCATION

This course will help students identify and begin to demonstrate locomotor/non-locomotor, striking, throwing/catching, and kicking, rhythms, manipulative skills and health related components.

KINDERGARTEN READING

The kindergarten reading course is designed to build independent readers and critical thinkers. It combines systematic and explicit foundational skills instruction to support students' reading development. In addition, students learn key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts.

KINDERGARTEN SCIENCE

The kindergarten science course begins with learning about the weather, then focuses on how matter reacts to pushes and pulls and finally how plants and animals interact with their environment. Students will learn how to solve problems in science and the engineering methods.

KINDERGARTEN SOCIAL STUDIES

The kindergarten social studies course offers students opportunities to learn about decision making skills, responsibilities, identifying historical leaders and American symbols, and conflict resolution. Then they will learn to compare past and present, customs, and cultures. Next, they will learn the costs and benefits when making

personal decisions and deciphering between wants and needs. Finally, they will learn about maps, globes, and other geographic models.

KINDERGARTEN WRITING

The kindergarten writing course is designed to help students build writing skills and to support them as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They learn a process they can use to take a piece of writing from an idea to first draft to a final published piece. Students produce and publish their own writing throughout this course.

1ST GRADE ART

First grade students in this course will continue their learning of artists and art materials. Emphasis on colors--primary, secondary, warm and cool as well as the other elements of art will expand their knowledge and creativity.

1ST GRADE MATH

The first grade math course offers students a variety of learning experiences focusing on addition and subtraction, place value, measurement, and shape. Students explore the relationship between addition and subtraction, number sentences and problem solving. Building an understanding of place value, students learn to see and use the relationships between numbers and groupings of tens and ones. Students also experience activities in which they extend the count sequence, measure lengths, reason with shapes, and begin to tell time and interpret data. Fluency with addition and subtraction within ten is built throughout the year.

1ST GRADE MUSIC

This course offers a variety of learning experiences that include singing, improvisation, movement, listening activities and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter, form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with quarter notes/rests and eighth notes as well as reading, singing, and composing melodies that are written on the Treble staff that include the solfège pitches mi, so, and la.

1ST GRADE PHYSICAL EDUCATION

In this course students will be able to identify, have knowledge of physical activity content and to be able to demonstrate developmentally appropriate movement within locomotor/non-locomotor skills, striking, throwing/catching, and kicking skills, rhythms, manipulative skills and health related components.

1ST GRADE READING

The first grade reading course is designed to build independent readers and critical thinkers. It combines systematic and explicit foundational skills instruction to support students' reading development. In addition, students learn key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts.

1ST GRADE SCIENCE

First grade students in this course will learn about plants and animals, what light and sound is made of and how it interacts with the world and our place with the sun the moon and the stars. Students will work on projects and learn how to solve engineering problems as they learn.

1ST GRADE SOCIAL STUDIES

The first grade social studies course offers students opportunities to predict the positive/negative effects of choices and model appropriate choices on a daily basis. Then they will learn about supply, demand, scarcity, producers, and consumers. They will identify primary and secondary sources. Next, students will understand roles of leaders at school, city, state and country. Finally, students will use a world map and globe. They will also identify the 7 continents.

1ST GRADE WRITING

The first grade writing course is designed to help students build writing skills and to support them as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They learn a process they can use to take a piece of writing from an idea to first draft to a final published piece. Students produce and publish their own writing throughout this course.

2ND GRADE ART

Second grade students in this course will make art with a variety of materials and using more advanced processes. Artists from all over the world and throughout history will be explored and used as inspiration for art making.

2ND GRADE MATH

The second grade math course offers students a variety of learning experiences focusing on addition and subtraction, place value, measurement, and shape. Students increase their knowledge of place value to three-digit numbers, and build an understanding of addition and subtraction within 1000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction. Problem solving is extended as students explore measurement and relate addition and subtraction to length. Students also experience activities in which they work with time, money, data, and the attributes of shapes. Fluency with addition and subtraction within 20 is built throughout the year.

2ND GRADE MUSIC

This course offers a variety of learning experiences that include singing, improvisation, movement, listening activities, part-work and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter [simple and compound], form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with whole notes/rests, half notes/rests, quarter notes/rests and eighth notes as well as reading, singing, and composing melodies that are written on the Treble staff that include the solfege pitches do, re, mi, so, and la.

2ND GRADE PHYSICAL EDUCATION

In this course, students will identify, retain knowledge about physical activity content and be able to demonstrate developmentally appropriate movement within locomotor/non-locomotor skills, striking, throwing/catching, and kicking skills, rhythms, manipulative skills and health related components.

2ND GRADE READING

The second grade reading course is designed to build independent readers and critical thinkers. It combines systematic and explicit foundational skills instruction to support students' reading development. In addition, students learn key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts.

2ND GRADE SCIENCE

Second grade students in this course will learn how matter interacts with its surroundings, how the Earth has changed over time and the interactions of life with both energy and matter. Projects and engineering problems are just some of the ways students will learn.

2ND GRADE SOCIAL STUDIES

The second grade social studies course offers students opportunities to describe democratic principles, roles and responsibilities within a community, and resolving disputes in a community peacefully. Then they will compare/contrast habitats, daily lives, and resources of Native Americans (Woodlands/Plains). Next, they will learn about all parts of a map and create a map, learn a variety of landforms and other environmental characteristics, and locate 7 continents, 5 oceans, and the equator. Finally, they will describe production of goods and services and learn how people earn and save money.

2ND GRADE WRITING

The second grade writing course is designed to help students build writing skills and to support them as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They learn a process they can use to take a piece of writing from an idea to first draft to a final published piece. Students produce and publish their own writing throughout this course.

3RD GRADE ART

Third grade students in this course will expand their knowledge of art and artists as it relates to cultures throughout time. Further understanding and exploration of the elements of art will happen through personal art making and using more elaborate processes.

3RD GRADE MATH

The third grade math course offers students a variety of learning experiences focusing on multiplication, division, fractions, measurement, and shape. Students build on their knowledge of addition and subtraction to understand the concepts of multiplication and division. An understanding of fractions as numbers is developed using physical

and visual models. The relationship between geometric and number concepts is developed as students explore area, and how it relates to addition and multiplication. Problem solving is extended throughout the year as students explore the four operations and measurement, including time, volume, and mass. Students also experience activities in which they reason with data and the attributes of shapes. Fluency with products within 100 is built throughout the year.

3RD GRADE MUSIC

This course offers a variety of learning experiences that include singing, improvisation, movement, listening activities, part-work [rounds and ostinatos] and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter [simple and compound], form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with whole notes/rests, dotted half note, half notes/rests, dotted quarter note, quarter notes/rests, eighth notes, and sixteenth notes. They will also be reading, singing, and composing melodies that are written on the Treble staff that include the solfege pitches so, la, do, re, mi, so, and la as well as identifying and reading notes on the treble clef using the standard music alphabet [ABCDEFG].

3RD GRADE PHYSICAL EDUCATION

In this course, 3rd grade students will explore fitness principals, lead up activities and healthy choices.

3RD GRADE READING

The third grade reading course is designed to build independent readers and critical thinkers. Students learn and apply key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts. Vocabulary lessons provide instruction in word meanings and focus on developing word learning strategies to support students when reading independently.

3RD GRADE SCIENCE

Third grade science offers students hands on learning opportunities focusing on heredity, animal adaptations and the structure and processes of plants and animals. They will combine this learning with engineering and problem solving.

3RD GRADE SOCIAL STUDIES

The third grade social studies course offers students opportunities to use their economic terms and resources. They will use a cost-benefit analysis to make economic decisions. Then they will identify roles and responsibilities of the 3 branches of the Federal Government, the importance of national documents, and develop and defend a position on a local/school issue. Next, they will describe and analyze ecosystems and landforms, read and construct a map, and read and construct a timeline. Finally, they will compare and contrast the three regions of colonists, identify and define specific terms related to colonial times, and how Native Americans and colonists used landforms.

3RD GRADE WRITING

The third grade writing course is designed to help students build their writing skills as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They use the writing process of prewriting, drafting, revising, proof-reading and publishing when writing for variety purposes and audiences. Grammar and mechanics instruction occurs during the revision and proofreading phases of the writing process.

4TH GRADE ART

Fourth grade students in this course will further develop their visual arts language through a deeper understanding of the elements of art. Students will compare art from different time periods or cultures to further understand art's role in societies and as inspiration for their own art-making.

4TH GRADE MATH

The fourth grade math course offers students a variety of learning experiences focusing on operations with whole numbers, fractions, decimals, and geometric figures. Students extend their knowledge of place value and the four operations to solve problems involving multi-digit whole numbers. Fraction concepts are developed as students gain an understanding of fraction equivalence, addition and subtraction of fractions, and multiplication of fractions by whole numbers. The relationship between fractions and decimals is developed as students come to understand decimal notation and compare decimal fractions. Students are introduced to the attributes of lines and angles which they then use to analyze and classify shapes. Problem solving is extended throughout the year as students explore the four operations, number patterns, data, and measurement, including conversions.

4TH GRADE MUSIC

This course offers a variety of learning experiences that include singing, improvisation, movement, listening activities, part-work [rounds, ostinatos, and two-part harmony] and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter [simple and compound], form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with whole notes/rests, dotted half note, half notes/rests, dotted quarter note, quarter notes/rests, eighth notes, and sixteenth notes, and syncopated patterns. They will also be reading, singing, and composing melodies that are written on the Treble staff that include the solfege pitches so, la, do, re, mi, fa, so, la, do' as well as identifying and reading notes on the treble clef using the standard music alphabet [ABCDEFGG].

4TH GRADE PHYSICAL EDUCATION

In this course, 4th grade students will explore, identify, demonstrate fitness principals, lead up activities and healthy choices.

4TH GRADE READING

The fourth grade reading course is designed to build independent readers and critical thinkers. Students learn and apply key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts. Vocabulary lessons provide instruction in word meanings and focus on developing word learning strategies to support students when reading independently.

4TH GRADE SCIENCE

Fourth grade science offers students the opportunity to learn about forces and motion, waves, the structure and function of organisms and the history of earth. Learning opportunities in fourth grade include engineering applications and project applications.

4TH GRADE SOCIAL STUDIES

The fourth grade social studies course offers students opportunities to compare physical characteristics of Missouri regions, label the 8 bordering states, key cities, and major rivers of Missouri, and construct and interpret maps. Also, they will outline the early settlements of Missouri. Then they will describe the Louisiana Purchase and the Lewis and Clark Expedition. Next, outline issues of Missouri statehood and the Missouri Compromise. They will describe motivations and hardships of pioneers during westward expansion. They will understand the 3 levels of state government. They will understand the meaning of interdependence and how taxes provide supported services. Finally, identify and describe the significance of the individuals from Missouri who have made contributions to our state and national heritage.

4TH GRADE WRITING

The fourth grade writing course is designed to help students build their writing skills as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They use the writing process of prewriting, drafting, revising, proof-reading and publishing when writing for variety purposes and audiences. Grammar and mechanics instruction occurs during the revision and proofreading phases of the writing process.

5TH GRADE ART

Fifth grade students in this course will access prior knowledge about art and the elements of art to infer the reasons behind different famous master works. Students will combine processes and materials to make artwork that is personal and fulfilling to themselves as artists.

5TH GRADE MATH

The fifth grade math course offers students a variety of learning experiences focusing on the four operations with whole numbers, fractions, and decimals as well as volume of geometric figures. Students extend their knowledge of place value and the four operations to solve problems involving multi-digit whole numbers and decimals. Fraction concepts are also extended as students use equivalent fractions to add and subtract fractions in any form. Students apply previous understandings of multiplication and division to multiply and divide fractions. Students are introduced to the concepts of volume and how volume relates to multiplication and addition. Problem solving is extended throughout the year as students explore numerical expressions, patterns, data, graphing on the coordinate plane, classification of two-dimensional figures, and measurement conversions.

5TH GRADE MUSIC

This course offers a variety of learning experiences that include singing, improvisation, movement, listening activities, part-work [rounds, ostinatos, and two-part harmony] and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter [simple and compound],

form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with whole notes/rests, dotted half note, half notes/rests, dotted quarter note, quarter notes/rests, eighth notes, and sixteenth notes, sixteenth note/eighth note combinations, and syncopated patterns. They will also be reading, singing, and composing melodies that are written on the Treble staff that include the entire scale using solfege pitches so, la, ti, do, re, mi, fa, so, la, ti, do' as well as identifying and reading notes on the treble clef using the standard music alphabet [ABCDEFGG].

5TH GRADE PHYSICAL EDUCATION

In this course, 5th grade students will demonstrate and understand their knowledge of fitness principals, lead up activities and healthy choices.

5TH GRADE READING

The fifth grade reading course is designed to build independent readers and critical thinkers. Students learn and apply key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts. Vocabulary lessons provide instruction in word meanings and focus on developing word learning strategies to support students when reading independently.

5TH GRADE SCIENCE

Fifth grade science offers students learning opportunities including ecosystem dynamics, how disease is transmitted, Earth's systems (with special attention to the role of water) and the general properties of matter. Students will engage these topics in a variety of methods including engineering projects and problem solving techniques.

5TH GRADE SOCIAL STUDIES

The fifth grade social studies course offers students opportunities to demonstrate use of absolute/relative location, have an understanding of ancient cultural groups, and explain the role of Spain, France, and England regarding the exploration of the New World. Then they will evaluate colonization and examine the cultural interactions and conflicts among these groups from colonial times through the American Revolution. Next, students will understand the causes of the Revolutionary War. Distinguish between the roles/perspectives of people in the American Revolution. Differentiate between powers and functions of local, state, and national government. They will also recognize the important principles of the Constitution and the Bill of Rights. Finally, demonstrate an ability to explain and compare different economic systems.

5TH GRADE WRITING

The fifth grade writing course is designed to help students build their writing skills as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They use the writing process of prewriting, drafting, revising, proof-reading and publishing when writing for variety purposes and audiences. Grammar and mechanics instruction occurs during the revision and proofreading phases of the writing process.

6TH GRADE ART

Sixth grade students in this course will use prior knowledge of art and the process of art making to create artwork that is personal and meaning-filled. Students will generate ideas, plan and create work using different artists, styles and historical content as inspiration.

6TH GRADE MATH

The sixth grade math course offers students a variety of learning experiences focusing on ratios, rational numbers, statistical thinking, expressions and equations. Students are introduced to the concepts of ratio, rate, and percentage, and use ratio reasoning to solve problems. Previous understanding of numbers is extended to the system of rational numbers with a focus on negative numbers. Students apply previous understandings of arithmetic to algebraic expressions, as they solve one-variable equations and inequalities, and analyze the relationships between dependent and independent variables. Statistical concepts are introduced as students develop an understanding of statistical variability and they learn to summarize and describe distributions. Computational fluency in all operations with whole numbers, decimals, and fractions is built throughout the year.

6TH GRADE MUSIC

This course offers a variety of learning experiences that include singing with expression, phrasing, diction, and breath control, improvisation, movement, listening activities, part-work [rounds, ostinatos, and two-part and three-part harmony] and composition. Students will experience, learn, and apply music vocabulary such as beat, tempo, dynamics, pitch, rhythm, melody, meter [simple and compound], form, and style. Throughout the course, students will work on music literacy skills such as reading, playing, and composing rhythms with whole notes/rests, dotted half note, half notes/rests, dotted quarter note, quarter notes/rests, eighth notes, eighth note triplets, sixteenth notes, sixteenth note/eighth note combinations, and syncopated patterns. They will also be reading, singing, and composing melodies that are written on the Treble staff that include the entire scale using solfege pitches so, la, ti, do, re, mi, fa, so, la, ti, do' as well as identifying and reading notes on the treble, bass, and grand staff using the standard music alphabet [ABCDEFGF].

6TH GRADE PHYSICAL EDUCATION

In this course, 6th grade students will consistently demonstrate, draw conclusions, and connect the knowledge of fitness principals, lead up activities and healthy choices.

6TH GRADE READING

The sixth grade reading course is designed to build independent readers and critical thinkers. Students learn and apply key comprehension strategies to help them understand what they read when reading a wide variety of literature and nonfiction texts. Vocabulary lessons provide instruction in word meanings and focus on developing word learning strategies to support students when reading independently.

6TH GRADE SCIENCE

The sixth grade science course offers students opportunities to learn about life science. Specifically students will start with cells, move on to how plants and animals use these cells for their structure and function, then how living creatures have evolved and finally how they interact with the non-living ecosystem.

6TH GRADE SOCIAL STUDIES

The sixth grade social studies course offers students opportunities label states, capitals, and regions of the U.S., demonstrate the ability to use maps, charts, and graphs, and use latitude and longitude to locate places. Then examine the origins and impact of social structures on society and relationships between people during Westward Expansion, identify the causes and effects of the Mexican War, Texas Revolution, and War of 1812. Next, they will identify the causes of the Civil War, investigate and identify the advantages of the North and South during the Civil War, and evaluate the key battles of the Civil War. Finally, examine the origins and impact of social structures on society and relationships between people during the Reconstruction Era.

6TH GRADE WRITING

The sixth grade writing course is designed to help students build their writing skills as they become independent writers. Students hear and discuss examples of good writing and write original pieces in a variety of genres. They use the writing process of prewriting, drafting, revising, proof-reading and publishing when writing for variety purposes and audiences. Grammar and mechanics instruction occurs during the revision and proofreading phases of the writing process.