

Lake Mills
Middle School
Course Description Book

2018 - 2019

| Index | |
|-----------------------------------|---------------|
| Course Descriptions for 6th Grade | Pages 3 - 6 |
| Course Descriptions for 7th Grade | Pages 7 - 12 |
| Course Descriptions for 8th Grade | Pages 13 - 20 |

COURSE DESCRIPTIONS FOR 6TH GRADE

Health 6 - 30 day rotation

Health 6 gives students a broad overview of health topics that promote having a healthy lifestyle.

Keyboarding - 30 day rotation

Keyboarding 6 is a pass/fail course that is based on the premise that all students can and should become proficient in keying skills. Students will use an online platform to review, learn and practice essential skills.

Course Outcomes:

- Learns the basic layout of the keyboard and proper keying practices.
- Learns correct posture and technique for keyboarding.
- Continues to increase speed and accuracy of keyboarding skills.
- Learns digital keyboarding standards such as one space keying.
- Learns to use a number pad for keying numbers quickly and efficiently.
- Practices proper touch keyboarding technique in short timed exercises.
- Practices building speed and accuracy while touch keyboarding.
- Gains speed and accuracy in typing.
- Practices typing using word processing software.

Music Essentials - 30 day rotation

Music Essentials is a 6th Grade Exploratory class that meets daily for 30 days. This course focuses on understanding the basics of singing and reading music in order to allow music to be a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners.

Course Outcomes:

- Understand the basics of vocal production and demonstrate proper beginning singing technique
- Understand music as it relates to history and culture (with a focus on American Folk Songs)
- Understand the basic elements of music theory (Music Terms and Symbols, Pitch, Rhythm, Dynamics, Tempo)
- Explore classical music and musicals
- Experiment with music composition technology

Reading Laboratory - Rotation class

This is a semester long class which meets three days a week. This class is self-directed and supplements the core reading program by providing continued instruction in:

- phonics
- decoding text
- reading skills
- comprehension skills

Communications

This year-long course reviews, builds upon, and utilizes the skills obtained and adds to the framework for developing essential communication skills. As 6th graders, students can expect to use the LMCS district wide rubrics for writing and oral presentations throughout the year, which are utilized to teach students to evaluate successful communication performances. A balance between writing, listening and speaking helps to ensure learning for all.

Course Outcomes:

- Access, evaluate, and integrate information to communicate with others.
- Apply an understanding of common writing conventions.
- Demonstrate understanding and application of the writing process.
- Demonstrate various methods of writing development.
- Work successfully in both cooperative and individual roles.
- Utilize problem solving strategies to meet the needs of audience and purpose.
- Utilize technology as an effective tool for communication.
- Analyze oral and visual presentations for increased achievement.

Math

6th grade math is a year long course. In this course students will learn numerical expressions, fractions and decimals, area of shapes, rates and ratios, solving equations and inequalities, and an introduction to statistics.

Course Outcomes:

- Understand ratio concepts
- Use ratio reasoning
- Perform fraction and decimal operations
- Understand rational numbers
- Write, interpret, and use expressions, equations, and inequalities
- Solve problems involving area, surface area, and volume
- Summarize and describe distributions
- Understand variability

Physical Education

A variety of programs will be offered throughout the year with an emphasis on recreational games, competitive games, aerobic fitness and team sports. This is a pass/fail course with an emphasis on class participation, and attendance.

Course Outcomes:

- Understand the importance of physical activity to a healthy lifestyle.
- Understand the importance of following rules.
- Understand the importance of good sportsmanship.
- Understand criteria for a quality performance in various sports.
- Demonstrate respect for all individuals as they work toward personal wellness goals.

Science

Sixth grade science is a year long course where the students will explore and experience a variety of areas within the field of science including life, physical, and earth sciences through the use of reading, research, observation, discussion, participation in individual and group projects, and utilization of the scientific research process and experiments.

Reading

6th Grade Reading is a year long course driven by an authentic text that anchors core instruction around the following - analyzing complex text; skill mastery; problem solving; and critical thinking.

Course Outcomes:

- Students will read closely to infer what the text says using key parts of the text as support
- Students will summarize central ideas/themes of a text using key supporting details and ideas separate from personal opinions/judgements
- Students will determine the meaning of words and phrases as they are used in the text including figurative, connotative, and technical meanings
- Students will analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text
- Students will detect and describe story elements such as theme, setting, plot, tone, fact/opinion, and problem/solution
- Students will determine an author's point of view or purpose in a text and explain how it is conveyed
- Students will compare and contrast different formats of a text with similar themes and topics
- Students will read and comprehend 6th grade texts independently and proficiently
- Students will apply word analysis skills in decoding unfamiliar grade 6 vocabulary by using Greek or Latin roots and affixes, reference materials, parts of speech, and/or figures of speech to determine the meaning of an unknown word/phrase

Social Studies

6th grade social studies is a year long course. It centers around world geography and world cultures. It focuses on spatial understanding of the world and the location of continents and countries. Students will analyze regional, environmental, and cultural characteristics of places, how these influence the people who live there, and how they have changed over time.

Course Outcomes:

- Students will demonstrate knowledge of the five themes of geography, location, place, human interaction with the environment, movement and region
- Students will use various representations of the earth
- Students will examine the interaction between cultures and the environment
- Students will analyze the causes, consequences, and possible solutions to global issues
- Students will compare and contrast how different groups use language, customs, religion, the arts, and literature
- Students will analyze how diverse cultural backgrounds affect values, beliefs, and point of view
- Students will describe how cultural values, norms and social forces shape an individual's life
- Students will determine how groups and institutions work to meet individual needs in society

- Students will compare and contrast how different cultural groups use science and technology to meet their needs

Band

Sixth grade band is an elective open to any student who is interested in fostering their musical growth. Sixth Grade band meets every other day for one class period. The course enables a student to develop musical talents through participation in honor bands, solo/ensemble recital, band lessons, and a variety of concerts for the public. The mission of the Lake Mills Community School sixth grade Band Program is to provide a quality instrumental music education for our students while encouraging opportunities for self expression through music in group and individual settings. The sixth grade band program is dedicated to fostering aesthetic growth as an essential part of a child's total education and to develop the highest possible level of musical achievement through a comprehensive, standards-based curriculum, in keeping with each child's needs and abilities.

Course Outcomes:

- Perform on instruments, alone and with others, a varied repertoire of music
- Read and notate music
- Listen to, analyze, and describe music
- Evaluate music and music performances
- Understand relationships between music, the other arts, and disciplines outside the arts
- Understand music in relation to history and culture
- Execute musical directions of the director and make appropriate notation in the music score
- Demonstrate proper technique including breath support, articulation, and tone quality
- Exhibit poise in performing publicly as a member of an ensemble

Chorus

6th Grade Chorus is an elective class that meets on alternating days during school hours with three required performances throughout the year. The primary focus of 6th Grade Chorus is to instill in students the joy of participating in vocal music. 6th Grade Chorus provides opportunities for self-expression and is a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners through personal accomplishments and accountability within a group setting. Students who participate in chorus are eligible to audition for and perform in festivals sponsored by the Iowa Choral Directors' Association.

Course Outcomes:

- Sing with musicality a wide variety of vocal music styles
- Understand music as it relates to history and culture
- Analyze and evaluate music and music performances
- Learn choral music through listening and reading music (two-part singing)
- Increase an understanding of musical elements (rhythm, melody, harmony, form, expressive elements, and style) through vocal music
- Execute musical directions of the chorus director and make appropriate notation in the music score
- Demonstrate proper vocal technique including breath support, articulation, and tone quality
- Demonstrate choral singing techniques including blend, balance, phrasing, and intonation

- Exhibit poise in performing publicly as a member of a choral ensemble

Need to Add:

Art 6

Hunter Safety

7th grade:

Project Citizen

8th grade:

Music 8

COURSE DESCRIPTIONS FOR 7TH GRADE

Agricultural Education 7 - Rotation Class

This course is a six week rotational class where students will learn about leadership, personal growth, career success, working in an organization and opportunities within FFA. Animal science, horticulture and agriculture careers are also covered in this class. Students will participate in class activities and discussions to enhance their understanding of these concepts.

Course Outcomes:

- Define leadership and recognize characteristics of being a leader
- Describe ways to facilitate personal growth
- Identify strategies for successful careers
- Compare three philosophies of leadership
- Recognize how FFA has changed and recognize opportunities for being involved in FFA
- Describe the importance of beliefs and values in an organization such as the FFA
- Identify careers in animal science
- Explain why it is important to handle livestock responsibly
- Identify careers in horticulture

Art 7 - Rotation Class

Art 7 is a six week pass/fail rotation course that is based on the premise that all students can and should become actively involved with experiences in the visual arts that include creating art, analyzing art, learning about art history, and responding aesthetically. Students will experience several different art styles, use several different art media, and learn art terms and techniques throughout this course.

Course Outcomes:

- Generate and organize artistic ideas and works.
- Refine and complete artistic work.
- Analyze, develop and convey meaning through presentation of artistic work.
- Perceive, interpret, and apply criteria to evaluate artistic work.
- Relate artistic ideas through art history, cultures and personal experiences.

Health 7 - Rotation Class

Seventh Grade Health gives students a broad overview health topics that promote healthy lifestyle choices. An emphasis on body, food, and fitness encourages students to become both lifelong learners and healthy contributors.

Financial Literacy - Rotation Class

This course is an exploratory class in the Business program. Students will understand the importance of giving, saving, and spending wisely. A hands-on investing simulation gives students the opportunity to explore and learn about real-world forms of investing. Two main outcomes determine the layout of the class. Students will learn to count back change accurately and essential financial concepts will be assessed using an online program, EverFi Financial Literacy.

Course Outcomes:

- Work with money to count back change
- Complete EverFi Financial Literacy certification

Industrial Technology - Rotation Class

This course is an exploratory class in the Industrial Technology Program. Students will learn and develop basic skills in mechanical drafting including measuring. Students will also experience designing, building and racing their own CO2-powered dragster. This hands-on project requires problem-solving skills and tool safety.

Course Outcomes:

- Understand the importance of planning.
- Understand the importance of safety.
- Understand the operation of basic tools and machinery in making a project.

Unit Titles with Outcomes:

- Draw and measure objects on paper.
- Design a project.
- Calculate material costs.
- Practice safe use of tools and machines.

Spanish 7 - Rotation Class

This is a pass/fail six week rotation class that meets once in the first semester. The course is designed to introduce students to learning another language as well as why it is important to be familiar with different languages and cultures.

Course Outcomes:

- Identify benefits to learning a second language.
- Become familiar with the Spanish alphabet and the phonetic rules of the letters and letter combinations.
- Become comfortable reading, writing and speaking using basic vocabulary for greetings, questions and answers
- Be introduced to the Spanish words for colors and numbers.
- Utilize the vocabulary to create a conversation with classmates that will be performed in front of the class.
- Research and present information on a Spanish speaking country.
- Gain knowledge of some cultural aspects of Spanish speaking cultures.

Technology 7 - Rotation Class

Technology 7 is a rotation course that meets 15 days at a time, and meets once per quarter. This course provides a chance for students to learn how to design, develop, create, and/or test digital technology products. They will work both individually and collaboratively to create media-rich products and display, publish, or perform them for a variety of audiences. Some of the programs utilized are Google Sheets, Google Docs, Google Drawing, Lucid Press, Powtoon, and presentation software such as Knovio.com, WeVideo.com, Google Slides, and a storyboard program at storyboardthat.com.

Communications

This year-long course reviews, builds upon, and utilizes the skills obtained adds to the framework for developing essential communication skills. As 7th graders, students can expect to use the LMCS district wide rubrics for reading, writing and oral presentations throughout the year, which are utilized to teach students to evaluate successful communication performances. A balance between reading, writing, listening and speaking helps to ensure learning for all. Various forms of fiction/ nonfiction expose students to real world and classical text, in-turn helping students achieve identified outcomes in reading, writing, listening, speaking, and viewing. An emphasis is placed upon the analysis of text and real world exposure, both through 21st century technology and literacy skills.

Course Outcomes:

- Access, evaluate, and integrate information to communicate with others.
- Apply an understanding of common writing conventions
- Demonstrate understanding and application of the reading and writing process.
- Demonstrate various methods of writing development.
- Work successfully in both cooperative and individual roles.
- Utilize problem solving strategies to meet the needs of audience and purpose.
- Utilize technology as an effective tool for communication.
- Analyze written, oral, and visual presentations for increased achievement.

Core Math 7

Core Math 7 is a year long course. This course focuses on adding, subtracting, multiplying, and dividing integers and rational numbers, comparing ratios, proportions, and percents, finding the area, surface area, and volume of shapes, and an introduction to probability and statistics.

Course Outcomes:

- Analyze proportional relationships
- Perform rational number operations
- Use radicals and integer exponents
- Generate equivalent expressions
- Connect proportional relationships and lines
- Solve problems using linear equations and inequalities
- Understand geometric relationships and similarity
- Solve problems involving angles, surface area, and volume
- Analyze and compare populations
- Find probabilities of events

Extended Core Math 7

Extended Core Math 7 is a year long course. This course focuses on adding, subtracting, multiplying, and dividing integers and rational numbers, comparing ratios, proportions, and percents, and constructing drawings of angles and shapes.

Course Outcomes:

- Analyze proportional relationships

- Perform rational number operations
- Generate equivalent expressions
- Solve problems using linear equations and inequalities
- Understand geometric relationships
- Solve problems involving angles, surface area, and volume
- Analyze and compare populations
- Find probabilities of events

Physical Education

A variety of programs will be offered throughout the year with an emphasis on recreational games, competitive games, aerobic fitness and team sports. This is a pass/fail course with an emphasis on class participation, and attendance.

Course Outcomes:

- Understand the importance of physical activity to a healthy lifestyle.
- Understand the importance of following rules.
- Understand the importance of good sportsmanship.
- Understand criteria for a quality performance in various sports.
- Demonstrate respect for all individuals as they work toward personal wellness goals.

Science

This year-long course is designed to present concepts of Physical Science, Life Science, Earth and Space Sciences, and Engineering, Technology, and Applications of Science and to relate them to real world situations. Units of this course include Motion and Stability, Energy, From Molecules to Organisms, Ecosystems, Heredity, Earth's Place in the Universe, and Engineering Design. This course uses an application-oriented approach to teach the concepts of sciences and emphasizes problem solving, decision making and hands on activities.

Course Outcomes:

- Review and demonstrate lab safety procedures.
- Apply the scientific method to solve problems.
- Explore science-related careers.
- Determine factors affecting electric and magnetic forces.
- Understand the relationships among energy transferred, type of matter, mass and kinetic energy.
- Make connections between living organisms and natural resources.
- Develop and use a model of the Earth-sun-moon system to describe cyclic patterns of lunar phases, eclipses, and seasons.
- Analyze data from tests among several design solutions to identify best characteristics of each to combine into a new solution.

US History Beginnings to 1865 - Social Studies 7

This is a survey year-long course in American history from the formation of the thirteen colonies to the causes of the American Civil War. The threads of America's economic, cultural, social, and political history are woven together in chronological order as the events occurred in the natural course of history.

Since much of history is passed down through the written word, a great deal of reading is expected. Through this information, the student will be prepared to face the problems of today and tomorrow with knowledge and a deep respect for those skills necessary for being a lifelong contributor to society.

Course Outcomes:

- Understand historical patterns or time and the relationship among these elements. (cause/effect, conflict, transportation, colonial systems growth and decline.)
- Understand how and why people create, maintain or change systems of power, authority, and governance. (political events, nationalism, religious and social reform)
- Understand the role of individuals and groups within a society as promoters of change or the status quo. (specific individuals and their values, impact in major areas of history)
- Understand the role of innovation on the development and interaction of societies.
- Understand cause and effect relationships and other historical thinking skills in order to interpret events and issues.

7/8 Band

Middle School Band is an elective class open to all students interested in furthering their instrumental music abilities. MS Band is a one credit class that meets regularly during the school day with quarterly performance requirements. The purpose of the organization is to broaden the student's perspective of music through a wide variety of musical literature and instrumental music experiences. Students are able to develop their musical talents through experiences in Concert Band, Winter Guard, Drumline, Honor Bands, and individual/group lessons. Middle School Band provides opportunities for self-expression and is a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners through personal accomplishments and accountability within a group setting.

Course Outcomes:

- Perform on instruments, alone and with others, a varied repertoire of music.
- Read and Notate Music
- Listen to, analyze, and describe musical performances.
- Evaluate music and music performances.
- Understand relationships between music, the other arts, and disciplines outside the arts.
- Understand music in relation to history and culture
- Demonstrate proper instrumental technique (tone, intonation, posture, musicality)

7/8 Chorus

7/8 Chorus is an elective class that meets on alternating days during school hours with three required performances throughout the year. This course is open to all students, regardless of prior experience. The primary focus of this ensemble is to instill in students the joy of participating in vocal music while navigating the changing voice. 7/8 Chorus provides opportunities for self-expression and is a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners through personal accomplishments and accountability within a group setting. Students who participate in chorus are eligible to audition for and perform in festivals sponsored by the Iowa Choral Directors' Association and the American Choral Directors' Association.

Course Outcomes:

- Sing with musicality a wide variety of vocal music styles
- Understand music as it relates to history and culture
- Analyze and evaluate music and music performances
- Learn choral music through listening and reading music (three-part singing)
- Increase an understanding of musical elements (rhythm, melody, harmony, form, expressive elements, and style) through vocal music
- Execute musical directions of the chorus director and make appropriate notation in the music score
- Demonstrate proper vocal technique including breath support, articulation, and tone quality
- Demonstrate choral singing techniques including blend, balance, phrasing, and intonation
- Exhibit poise in performing publicly as a member of a choral ensemble

COURSE DESCRIPTIONS FOR 8TH GRADE

Agricultural Education 8 - Rotation Class

This course is a six week rotational class where students will be introduced to the first six weeks of the Introduction to Agriculture, Food and Natural Resources curriculum. Students will use mathematics, science, writing and reading in learning about how agriculture has changed over the years. Students will become familiar with Supervised Agricultural Experience (SAE) projects and why they are important. They will also be introduced to the opportunities of FFA and things they can participate in as a middle school and high school member if they choose to do so.

Course Outcomes:

- Determine our basic needs as humans
- Research top commodities produced in the U.S.
- Explore education and personal growth opportunities through FFA
- Complete components of Career Development Events (CDEs)
- Investigate career opportunities available in agriculture
- Develop a SAE implementation plan
- Work collaboratively to complete team building challenges
- Use proper parliamentary procedures to voice an opinion
- Demonstrate how to make a main motion and amendment

Art 8 - Rotation Class

Art 8 is a six week pass/fail rotation course that is based on the premise that all students can and should become actively involved with experiences in the visual arts that include creating art, analyzing art, learning about art history, and responding aesthetically. Students will experience several different art styles, use several different art media, and learn art terms and techniques throughout this course.

Course Outcomes:

- Generate and organize artistic ideas and works.
- Refine and complete artistic work.
- Analyze, develop and convey meaning through presentation of artistic work.
- Perceive, interpret, and apply criteria to evaluate artistic work.
- Relate artistic ideas through art history, cultures and personal experiences.

Digital Citizenship/Coding - Rotation Class

This course is 30 days in length. We will discuss what it means to be a digital citizen and making positive choices when utilizing technology. Students will also be introduced to coding and will be graded as pass/fail. Students will learn how to code using blockly and will use their coding knowledge to complete some real world tasks (coding robots, creating a video game, etc.).

Course Outcomes:

- Learn the basics of coding using blockly
- Analyze code that is incorrect and find the mistakes
- Learn about copyright, making positive choices when utilizing technology, etc.

Maker Space/STEAM - Rotation Class

Students will participate in a 15 day rotation class utilizing the tools in the Maker Space. The design thinking model will be taught and students will be responsible for creating an object that could be sold in a store to solve a real world problem. Students will be responsible for creating publicity materials to explain what they have created and will present their final project at the end of the time. Some tools students may use when creating their object include: 3D printer, laser engraver, sewing machine, hand saw, dremel, hot glue guns, etc.

Weight Training 8-12

This is a first hour rotation course, that lasts for 30 days and is a highly individualized course, only students that are interested in improving strength and conditioning should enroll in this course. Enrollment will be limited to twenty students.

Course Outcomes: :

- Explore components for a personal fitness plan.
- Explore components for a personal weight training program.
- Design and implement a personal fitness plan.
- Design and implement a personal weight training program

Industrial Technology - Rotation Class

This course is an exploratory class in the Industrial Technology Program. Students will learn and develop basic skills in mechanical drafting including measuring. Also, students will experience a hands-on woods project that requires problem-solving skills and tool safety.

Course Outcomes:

- Understand the importance of planning (measure twice, cut once).
- Understand the importance of safety.
- Understand the operation of basic machinery in making a project.

Unit Titles with Outcomes:

- Technology in Action
- Identify pictorial drawings.
- Design a project.
- Figure material costs.
- Practice safety.
- Use of tools and machines.

Spanish 8 - Exploratory Class

This is a pass/fail 6 week rotation class that meets once in the second semester. The course is designed to introduce students to learning another language. Language learned in Exploratory Spanish 7 is reviewed. More focus is on conversational Spanish and cognates.

Course Outcomes:

- Review basic conversation.
- Identify cognates rules to increase conversational skills.
- Identify the Spanish speaking countries and their capitals.
- Create conversations in writing and speaking.
- Practice asking and answering unscripted questions.

Keyboarding - Rotation Class

Keyboarding is a six week rotation, with Character and Leadership Development and QUEST, taught during both 1st and 2nd semester. As a pass/fail course, students are expected to use an online program to improve their keyboarding accuracy and speed, create real world documents, and familiarize themselves with a variety of word processing applications.

Units of Study:

- Career Choice Research
- Business Letters
- Guest Speaker & Care Center Reflections
- DC Journal Responses

8th Grade Character and Leadership Development-SCORE

Insert course description

Course Outcomes:

- Identify and practice useful executive function skills.
- Identify workplace skills.
- Research a chosen occupation.
- Use collaborative technology to share information.
- Determine how career choices relate to personal interests, skills, and abilities.
- Determine characteristics and educational requirements of career options.

QUEST - Rotation class

QUEST is a two six week course in rotation with Character and Leadership Development and Keyboarding. Quest focuses on goal setting, building a leadership concept, career and course alignment and intergenerational relationships.

Units of Study:

- Leadership Curriculum
- Care Center Visits
- My Academic Plan
- Growth Mindset

Civics

This class is integrated with the 8th Grade Communications class. The first three quarters we will be working on answering the following questions: - What is civics, politics and government? - What are the foundations of the American political system? - How does the government established by the Constitution embody the purpose, values and principles of American democracy? - What are the roles of the citizens in America? Students will analyze the powers and civic responsibilities of citizens and examine the origins, functions, and structure of the U.S. government. Content will include multiple historical eras and the changing perspectives in America's past, as well as connections between historical events. This content builds student skills in historical thinking, understanding change, and recognizing patterns in our past as a foundation for active citizenship. As a result of this course, students will gain an understanding of historical events and perspectives and analyze individual rights, democratic principles, and government institutions.

Course Outcomes:

- Demonstrate an understanding of civic life, politics and government.
- Demonstrate an understanding of the foundations of the American political system.
- Demonstrate an understanding of how government, established by the Constitution, embodies the purposes, values, and principles of American democracy.
- Demonstrate an understanding of the relationship the US has with other nations and its involvement in world affairs.
- Demonstrate an understanding of the roles of the citizen of American democracy.

Core Math 8

Core Math 8 is the course that needs to be taken before Algebra I. The course is essentially a pre-algebra course and covers several topics including simple equations, transformations, area, volume, and graphing. Core Math 8 typically follows Core Math 7.

Course Outcomes:

- Approximate real numbers and perform their operations
- Use exponents, connect proportional relationships and lines, solve systems of equations
- Define, evaluate, compare functions, and model relationships
- Understand congruence and similarity, apply Pythagorean Theorem, apply volume formulas
- Analyze bivariate data

Extended Core Math 8

Extended Core Math 8 is the course that needs to be taken before General Math. The course is essentially a pre-general math course and covers several topics including area, volume, statistics, and simple equations. Extended Core Math 8 typically follows Extended Core Math 7.

Course Outcomes:

- Solve problems involving angles, surface area, and volume
- Analyze and compare populations
- Find probabilities of events
- Approximate real numbers and perform their operations
- Use exponents, connect proportional relationships and lines, solve systems of equations

Pre-Algebra

Pre-Algebra is a year long course. This course focuses on adding, subtracting, multiplying, and dividing integers and rational numbers, comparing ratios, proportions, and percents, finding the area, surface area, and volume of shapes, and an introduction to probability and statistics. In addition the course focuses on transformations, angles, writing equations, the Pythagorean Theorem, and exponents.

Course Outcomes:

- Analyze proportional relationships
- Perform rational number operations
- Use radicals and integer exponents
- Generate equivalent expressions
- Connect proportional relationships and lines
- Solve problems using linear equations and inequalities
- Understand geometric relationships and similarity
- Solve problems involving angles, surface area, and volume
- Analyze and compare populations
- Find probabilities of events

Communications

This 8th grade course balances reading, writing, listening, speaking, and viewing to prepare students for both the culminating DC trip and their entry into high school. The Iowa Core standards of reading and writing are the framework for the expansion of personal vocabulary and further development of effective analysis of literature. An emphasis is placed on the research process in preparation for the annual DC Trip and exposure to the real world. Fundamentals of grammar, organization, word choice and usage will be stressed, as will word processing skills for multiple papers. This course integrates a graded presentation to be added to each student's district wide oral presentation DVD, which will be available to all LMCS graduates. This will be a culmination of their 8th Grade Civics course and the multiple strategies students have investigated throughout the course year.

Course Outcomes:

- Demonstrate an understanding of the different literary genres.
- Demonstrate an understanding of the elements of literature.
- Examine and analyze selections of literature through discussion and research.
- Identify the cultural and literary contributions of authors.
- Develop effective written communication skills.
- Expand personal vocabulary utilizing a variety of word choices.
- Organize thoughts and clearly express written and oral points of view.
- Listen effectively.
- Demonstrate ways of working successfully in both cooperative and individual roles.
- Utilize technology as an effective tool for communications.
- Access, evaluate and integrate information.

General Math

General Math is the course that needs to be taken before Algebra or Extended Algebra I. The course is essentially a pre-algebra course and covers several topics including simple equations, transformations, area, volume, and graphing. General Math typically follows Extended Core Math 8.

Course Outcomes:

- Approximate real numbers and perform their operations
- Use exponents, connect proportional relationships and lines, solve systems of equations
- Define, evaluate, compare functions, and model relationships
- Understand congruence and similarity, apply Pythagorean Theorem, apply volume formulas
- Analyze bivariate data

Algebra 1

Algebra I is arithmetic which uses symbols such as x and y . Using symbols in this way makes it easier to study number patterns and solve problems. Algebra I builds on skills which have already been learned, helps develop new skills, and places an emphasis on problem solving. The three main elements of Algebra I are equations, graphing, and translating words into symbols.

Course Outcomes:

- Use Rational Exponents
- Perform Real Number Operations
- Solve Linear and Quadratic Equations
- Solve Inequalities and Systems of Equations
- Define, Evaluate, and Compare Functions
- Write Sequences
- Model Relationships
- Apply the Pythagorean Theorem
- Represent and Interpret Data
- Analyze Bivariate Data

Extended Algebra I Year 1

In Extended Algebra I Year one, chapters 1-7 of Algebra 1 is covered. We go at a slower and more in-depth pace to ensure student understanding and mastery. Students will be able to solve linear equations, as well as systems of equations. There is also an emphasis on graphing linear equations.

Course Outcomes:

- Use Rational Exponents
- Perform Real Number Operations
- Solve Linear and Quadratic Equations
- Solve Inequalities and Systems of Equations
- Define, Evaluate, and Compare Functions

Extended Algebra I Year 2

Extended Algebra 1 Year 2 is the second half of Algebra 1, chapters 6-12. In these chapters, we work with radicals, quadratic functions, and exponential functions. This includes simplifying, solving, and graphing. At the end of the year, we explore some probability and statistics.

Course Outcomes:

- Write Sequences
- Model Relationships
- Apply the Pythagorean Theorem
- Represent and Interpret Data
- Analyze Bivariate Data

Physical Education

A variety of programs will be offered throughout the year with an emphasis on recreational games, competitive games, aerobic fitness and team sports. This is a pass/fail course with an emphasis on class participation, and attendance.

Course Outcomes:

- Understand the importance of physical activity to a healthy lifestyle.
- Understand the importance of following rules.
- Understand the importance of good sportsmanship.
- Understand criteria for a quality performance in various sports.
- Demonstrate respect for all individuals as they work toward personal wellness goals.

7/8 Band

Middle School Band is an elective class open to all students interested in furthering their instrumental music abilities. MS Band is a one credit class that meets regularly during the school day with quarterly performance requirements. The purpose of the organization is to broaden the student's perspective of music through a wide variety of musical literature and instrumental music experiences. Students are able to develop their musical talents through experiences in Concert Band, Winter Guard, Drumline, Honor Bands, and individual/group lessons. Middle School Band provides opportunities for self-expression and is a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners through personal accomplishments and accountability within a group setting.

Course Outcomes:

- Perform on instruments, alone and with others, a varied repertoire of music.
- Read and Notate Music
- Listen to, analyze, and describe musical performances.
- Evaluate music and music performances.
- Understand relationships between music, the other arts, and disciplines outside the arts.
- Understand music in relation to history and culture
- Demonstrate proper instrumental technique (tone, intonation, posture, musicality)

7/8 Chorus

7/8 Chorus is an elective class that meets on alternating days during school hours with three required performances throughout the year. This course is open to all students, regardless of prior experience. The primary focus of this ensemble is to instill in students the joy of participating in vocal music while

navigating the changing voice. 7/8 Chorus provides opportunities for self-expression and is a medium for the development of healthy contributors, effective communicators, responsible citizens, creative/critical thinkers, and lifelong learners through personal accomplishments and accountability within a group setting. Students who participate in chorus are eligible to audition for and perform in festivals sponsored by the Iowa Choral Directors' Association and the American Choral Directors' Association.

Course Outcomes:

- Sing with musicality a wide variety of vocal music styles
- Understand music as it relates to history and culture
- Analyze and evaluate music and music performances
- Learn choral music through listening and reading music (three-part singing)
- Increase an understanding of musical elements (rhythm, melody, harmony, form, expressive elements, and style) through vocal music
- Execute musical directions of the chorus director and make appropriate notation in the music score
- Demonstrate proper vocal technique including breath support, articulation, and tone quality
- Demonstrate choral singing techniques including blend, balance, phrasing, and intonation
- Exhibit poise in performing publicly as a member of a choral ensemble

Science

Eighth grade science is a year long course that looks at the world. From the microscopic atoms and elements up to looking at the world as a whole. Emphasis is continuously put on how the Earth is changing, what is changing it, why it is changing, and how students themselves can prevent the harmful changes and magnify the positive changes.

Course Outcomes:

- Demonstrate a variety of science skills that will help students discover and interpret the natural world around them.
- Practice reasoning, critical thinking, decision making, and communication skills as students formulate opinions about the relationships among science, technology, environment, and society.
- Demonstrate the ability to work cooperatively in a team and independently to accomplish tasks.
- Compare and contrast different forms of matter and the changes that happen to them.
- Recognize and describe the characteristics of movement of the Earth's air and water.
- Compare and contrast rocks and minerals.
- Differentiate between various parts of the universe and the methods of studying the space beyond the Earth's surface.
- Describe the relationship of plate tectonics to the occurrence of earthquakes and volcanoes and various geological structures.