SIXTH GRADE COURSE DESCRIPTIONS

2016 - 2017

PREFACE

Sixth grade students will be enrolled in the following required courses: ELA (English Language Arts), mathematics, social studies, science, physical education/health and exploration courses. Each student will also be assigned an advisory class, during which the student will be guided in the areas of social, emotional and academic growth. If a student is not achieving at grade level in reading, writing or math, he or she may be enrolled in an intervention class to assist in their academic growth. This intervention class may take the place of the exploration courses.

SCIENCE 6

(Required, Full Year)

The science program is designed to provide all students with first hand experiences in the laboratory, field, and classroom. Our mission is to encourage a stimulating and positive attitude toward science and technology. We will be looking at Earth as a system: the biosphere, the hydrosphere, the atmosphere, and the geosphere. We will study how life on Earth has changed over time, factors that affect species living on the Earth, the structure and function of cells as part of living systems, and the impact that human populations have on the world's ecosystems.

SOCIAL STUDIES 6

(Required, Full Year)

Social Studies introduces the geography, history, government, economy, and cultures of the world with a strong emphasis on the Americas, Europe, Asia, and Africa. A variety of instructional materials and methods will ensure that all students learn through inquiry and by building upon individual strengths. Students will read, write, graph, and apply technology skills as they explore the world in which we live. Students will be challenged academically through individual, small group, and large group instruction.

MATHEMATICS 6

(Required, Full Year)

This course is designed to develop the concepts of operations with fractions and decimals. Students will explore percents, the perimeter and area of plane figures, similar and congruent figures, symmetry, spatial visualization and measurement. Students will represent and analyze data in charts and graphs. They will study patterns in sequences and functions. In addition there will be a focus on problem solving and communication. This course will lead to a student either taking Math, Pre-Algebra or Algebra (if offered in 2017-18) in the 7^{th}-Grade, with placement dependent on math grades, prognosis test score, and teacher recommendation.

ELA 6

(Required, Full Year)

The communication arts curriculum is designed to impart to the student a variety of skills necessary to enhance their ability to read, write, speak, and listen. This is accomplished through writing basic reports, essays, note taking, and focusing on the parts of speech.

PHYSICAL EDUCATION / HEALTH 6

(Required, Full Year)

GET YOUR BODY MOVING…IMPROVE YOUR HEALTH…YOUR MIND
AND YOUR ENERGY LEVEL!!!

This daily course, through a series of approved activities, promotes good health practices, good sportsmanship, self-control and a means of self-expression. It is a planned program of team sports, such as basketball, fleet ball, soccer and volleyball, as well as, individual and large group activities. Through these activities the student will learn rules and progression of skills that can be carried over into their everyday lives. A six (6) week course of health will be included to help students understand what comprises physical, mental, and social health, as well as the balance necessary to maintain overall health and wellness. Topics will include body systems, nutrition, fitness, drugs, tobacco, alcohol, safety, first aid, communicable and non-communicable diseases, and your body – growing and changing.

READING PROGRAM

(Full Year/Teacher Recommendation required)

Students deficient in reading skills will receive developmental reading instruction during this period.

Remedial Reading Services is a delivery of services, by a Reading Specialist, to groups of ten or less students that address the basic categories of reading including: comprehension, word study (phonics, vocabulary, fluency), and higher order reading/thinking skills. The major areas of reading instruction that are covered also include: main idea, sequences, compare/contrast, cause/effect, predicting, inferences, and drawing conclusions. The effort is to offer individual, pair, or small group instruction.

REMEDIAL READING 6 (Teacher Recommendation Required)
Qualified students will learn a variety of reading strategies that foster independence in reading. By using a wide range of material, i.e., novels, plays, textbooks, magazines, charts, etc., students will have an opportunity to become lifelong readers.

SIGMA 6 – MIDDLE SCHOOL GIFTED PROGRAM

(Specialized Program for students who meet entrance criteria)

Emphasis will be placed on the continual development of thinking, reading, and writing skills, especially analysis, synthesis, and evaluation. Students receive instruction in research skills, and are assisted on both individual and group projects. This class alternates with PE.

EXPLORATION PROGRAM

The Exploration Program provides every sixth grade student with the opportunity to be introduced to the elective programs of the secondary schools. Each student will be scheduled into six different areas of study during the year. Each area will be six weeks in length. Each student will be provided experience in the practical arts, fine arts, and computers.

ART 6

This course will serve as an introduction to the middle school art program and will focus on the elements of art, as well as provide a wide variety of artistic opportunities. This course is designed to build upon the students' elementary art program background and should help students to increase their knowledge and appreciation of art.

COMPARATIVE CULTURES 6 (Foreign Language)

Comparative Cultures is designed to give students an appreciation and an understanding of other ways of life. The class introduces the cultures of France, Germany and Latin America. The course will include basic expressions in 3 languages and an introduction to music, history, food, geography, sports, family life, and traditions of the countries.

COMPUTER EXPLORATION 6

Students will create exciting multimedia presentations using a variety of software applications and technology tools. They will explore the different uses of computer technology and become more skillful at computer keyboarding.

FAMILY & CONSUMER SCIENCE 6 (FACS)

The family and consumer sciences curriculum for Exploration 6 will include both basic skills in sewing and food preparation. The students will complete a sewing project using both hand and machine sewing skills. Table setting, table manners, measuring, following a recipe, and identifying equipment will be learned and applied in food labs.

INDUSTRIAL TECHNOLOGY 6

Students in this course will build and enhance their knowledge of technology, problem solving, and critical thinking skills. This 6-week course will help students develop prior knowledge for future Industrial Tech courses, as well as other related courses, such as Math, Science, Communication Arts, and Social Studies. Students will enhance their skills in math and science along with critical thinking and report writing.

MUSIC 6

Music is an extension of the elementary general music program. Emphasis is placed on the appreciation of various styles of music and of musical theatre. Students will be required to sing, play instruments, take notes, and participate in class.

ACADEMIC INTERVENTIONS

(Full Year - By teacher recommendation only)

ELA ESSENTIALS 6

This course is designed for students that need to improve their basic reading and writing skills to be more successful in all classes.

MATH ESSENTIALS 6

This course will focus on basic math skills. Specific gaps will be addressed through conceptually developmental lessons and targeted skill practice.

PERFORMING ARTS

(Full Year - Open to any sixth grade student)

BAND 6

Sixth grade band is a beginning course so no experience is necessary to sign up---all students are welcome to join! Students who participated in music at their elementary school are especially encouraged to enroll in beginning band. Band at this level meets in like-instrument groups to help students master skills specific to their instruments. Students may begin on trombone, baritone, trumpet, French horn, flute, clarinet, saxophone or percussion. The class will begin with fundamental sound production skills, note reading, rhythm reading, scales, musical terms, and performance skills. Students must rent or purchase an instrument for use in class and practice at home. Public performances are required and will be a contributing factor in the grade for this class. **Band directors reserve the right to make adjustments in instrument assignments based on band needs and student interest.**

MS BEGINNING CHOIR 6/7/8

Emphasis is placed on 2-part and 3-part singing and the development of a good choral sound, reading choral music, understanding the changing voice, and the development of sight-reading skills. All types of music will be performed, and the choir will represent the school in community performances. Public performances, both during and after regular school hours, will be required for this course and will be a major determining factor in the student's overall final grade.

ORCHESTRA 6

All students are welcome to join. Students who played violin or cello in 5th grade are especially encouraged to continue in orchestra. Beginning viola and bass will also be offered. Students in orchestra will focus on developing the basic skills of playing their stringed instrument, as well as, note and rhythm reading, music memorization, learning scales, understanding and using musical language correctly, and developing professional performance skills through playing various styles of music.

GENERAL ELECTIVES

(Semester Courses – Some classes may include 6th, 7th and 8th grade students)
These classes will take the place of the Exploration Program

PLTW (PROJECT LEAD THE WAY)

Semester Long Course:

DESIGN AND MODELING and AUTOMATION AND ROBOTICS 6/7/8
Design and Modeling (9 weeks/.5 semester): Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

Automation and Robotics (9 weeks/.5 semester) 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.

Semester Long Course:

MEDICAL DETECTIVES and SCIENCE OF TECHNOLOGY 6/7/8
Medical Detectives (9 weeks/.5 semester): Students play the role of real-life medical detectives 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.

Science of Technology (9 weeks/.5 semester): Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials.