

SIXTH GRADE COURSE DESCRIPTIONS

2023 – 2024

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.

CORE CLASSES

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 2023-24)** in the 7th - 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

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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

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

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.

REMEDIATION 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.

GIFTED

SIGMA 6 – MIDDLE SCHOOL 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.

ACADEMIC INTERVENTIONS

MATH ESSENTIALS 6

(Full Year - By teacher recommendation only)

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

ELECTIVE CLASSES

(Semester Courses)

Learn More About Holman's Elective Offerings [HERE](#)



ART:

2D DESIGN 6/7/8

The purpose of this course is to introduce students to a variety of art mediums while gaining a strong understanding of Studio Habits of the Mind. Students will learn new approaches to drawing and painting, including but not limited to perspective, portraiture, color theory, and art history and criticism. This course is intended to provide foundations for Advanced 2D Design.

(No prerequisite)

3D DESIGN 6/7/8

This introductory course offers students the opportunity to learn a variety of ceramic and sculpture techniques and terminology. The ceramic portion of the class will focus on the hand building methods

slab, coil, and pinch pot. The primary focus of this class is on the art of ceramics but will also incorporate sculpture. Students may use a variety of mixed media including clay, paper mache, plaster, wire, woodcarving and glass as this course prepares students for Advanced 3D Design. **(No prerequisite)**

ADVANCED 2D DESIGN 6/7/8 * (New course with Board approval)

Advanced 2D Design is a studio based course that expands on the knowledge and skills learned in 2D Design. Students will extend and explore knowledge of mediums including drawing, painting, digital media, mixed media and more. This course will consist of studio project based learning, and activities that will boost student critical thinking habits, improve critical collaborative participation, grow creativity and develop communication skills through writing and talking about art. This course focus is an exploration of the art world based on the fundamentals of the Studio Habits of the Mind and student driven learning in art studios of choice. **(Prerequisite: 2D Design)**

ADVANCED 3D DESIGN 6/7/8 *(New course with Board approval)

Advanced 3D Design is a studio based course that expands on the knowledge and skills learned in 3D Design. Students will extend and explore knowledge of mediums including ceramics hand building techniques, wire, woodcarving, paper mache, and plaster. This course will consist of studio project based learning, and activities that will boost student critical thinking habits, improve critical collaborative participation, grow creativity and develop communication skills through writing and talking about art. This course focus is an exploration of the art world based on the fundamentals of the Studio Habits of the Mind and student driven learning in art studios of choice. **(Prerequisite: 3D Design)**

TECHNOLOGY:

COMPUTER SCIENCE BASICS 6/7/8

In this course students will learn computer science skills at a personalized learning pace. Students will be given the opportunity to learn about the problem solving process, web development, interactive animations and games, as well as physical computing (circuit boards). The goal of this class is to make computer science accessible to students at all learning and readiness levels and to experience math and science in a new way. This will enable them to gain access to exploring careers in the tech field while in middle school.

DIGITAL MEDIA APPLICATIONS 6/7/8

Learn the basics of digital media creation like movies and web design. Also, learn to use tools to create digital media like digital cameras and camcorders.

FAMILY AND CONSUMER SCIENCES (FACS):

EXPLORE LAB 6/7/8

Explore Lab is an inquiry-based class where students can explore different topics which may be of interest for potential future courses at Holman. Topics can and will rotate throughout the year with different teachers exploring those different interests. Topics which students will learn more about will vary but may include any of these and more: exploration in musical theater, fantasy sports management (which includes mathematics, careers in sports research, sports debates/discussions,

graphic design, and website creation); journalism and tv newscasts; and any number of interests which students may take as a future developed course. Students will be given a pass/fail grade as they explore new interests.

FACS I 6/7/8

This course is the first course of three leading to various career pathways in Family and Consumer Sciences. Topics of study include basic food preparation, introductory sewing skills, peer and family relationships and introductory consumer education. Students will use problem-solving and cooperation skills as they individually and collectively to complete projects within these units. **(No prerequisite)**

INDUSTRIAL TECHNOLOGY:

INDUSTRIAL TECHNOLOGY 6/7/8

This class will provide an emphasis upon individual student design and upon hand tools using more complex take home projects. Experiences will include activities involving drafting, woods, electricity, and plastics. A model CO2 dragster will be constructed. Safety tests will be required.

WOODWORKING 6/7/8 (New Class)

Woodworking is comprised of two areas, drafting, and woodworking. Drafting is taught for 6 weeks and Woodworking finishes out the semester, which is 12 weeks. The course is an expansion and extension of the Exploratory courses in the 6th and 7th grade. It is built upon the exploratory experiences designed to promote unique individual student interest, needs, and abilities through the use of take-home projects. Instruction is given in the proper use of tools and acceptable lab procedures with an emphasis on Safety.

FOREIGN LANGUAGE:

INTRODUCTION TO WORLD CULTURES & LANGUAGES 6/7/8

Students in this course will explore each of the languages offered in Pattonville and will also be introduced to cultures, both current and historic, in order to better understand the impact of culture in their community and the world. To prepare students to be productive citizens in a global society, students will learn about different perspectives to cultivate an appreciation for diversity. Students will also explore their own interests through a variety of choice activities and research projects investigating different cultures and languages.

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 MUSIC 6/7/8

This course will use the computer to review and expand upon the concepts taught in the sixth grade general music exploratory program. Students will complete assignments using several music computer applications and the electronic musical keyboard. Elements of music, such as tone, rhythm, and form, will be taught, as well as music theory and history.

PLTW (PROJECT LEAD THE WAY)

(semester classes)

MEDICAL DETECTIVES 6/7/8

In the Medical Detectives, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

SCIENCE OF TECHNOLOGY 6/7/8

Science impacts the technology of yesterday, today, and the future. Students will 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.

Design and Modeling 6/7/8

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

Computer Science for Innovators and Makers 6/7/8

This course teaches students that programming goes beyond the virtual world into the physical world. Students are challenged to creatively use sensors and actuators to develop systems that interact with their environment. Designing algorithms and using computational thinking patterns, they code and upload programs to microcontrollers that perform a variety of authentic tasks. The unit broadens student understanding of computer science concepts through meaningful applications. Teams select and solve a personally relevant problem related with wearable technology, interactive art, or mechanical devices.

