

# Sagewood Middle School

2007/2008

## 7th Grade Required Courses

### MATHEMATICS 7 (one year)

Students entering the Sagewood Middle School mathematics program have three placement options: Math 7, Pre-Algebra 7, and Discovery Algebra 1. All are full-year courses.

**Math 7** is the first year of a two-year Pre-Algebra sequence that could lead to enrollment in Algebra 1 in ninth grade. Students who successfully complete Math 7 will take Math 8 in eighth grade.

**Pre-Algebra 7** is a one-year class that could lead to enrollment in Algebra 2 in ninth grade. Students who successfully complete this class will take Algebra 1 in eighth grade.

**Discovery Algebra 1** is for the very advanced (gifted) math student and is available by application and acceptance into the Discovery Program. Students who successfully complete this class will take Discovery Algebra 2 in eighth grade and could become eligible to take Honors Geometry in ninth grade.

### Math 7

The concepts introduced in this course include rational numbers, positive and negative numbers, fractions, decimals, equations, algebraic manipulations, ratios-proportions-percents, geometry, the metric system, linear equations, statistics, probability, and graphing. These concepts are introduced in seventh grade and expanded upon in eighth grade.

### Pre-Algebra 7

The concepts covered in this course include rational numbers, positive and negative numbers, fractions, decimals, equations, algebraic manipulations, ratios-proportions-percents, geometry, the metric system, linear equations, statistics, probability, and graphing. All of these concepts are covered in their entirety in seventh grade.

### Discovery Algebra 1

This class covers the use of variables, real numbers, first and second-degree equations, factoring, polynomials, solving equations with one and two variables, radicals, and algebraic and graphic applications. The class is meant to help students to develop problem solving processes, promote open-ended inquiry, introduce concepts through problems, and provide time for the development of concepts, generalizations, and skills as they learn algebra.

### SOCIAL STUDIES 7 EASTERN HEMISPHERE GEOGRAPHY (one year)

In this course, students will study both physical and cultural geography. Students will be graded on proficiency in all eight district middle school social studies standards. The five themes of geography-- location, place, human-environment interaction, movement, and region--will be used to study the Eastern Hemisphere. Course work will include research, organization, understanding cause and effect, content area

reading strategies, expository writing, and appreciation and understanding of world cultures.

### LANGUAGE ARTS 7 (one year)

This course concentrates on developing skills to increase proficiency in reading and writing. Students will develop and practice comprehension and critical thinking skills using both fiction and non-fiction texts. Students will also practice and develop writing skills, including understanding of process, purpose, and audience for writing using the Six Traits: organization, ideas, voice, word choice, sentence fluency, and conventions.

#### Discovery Language Arts

This program is designed for those students who need advanced academic programming beyond what can normally be expected in a middle school classroom. These students are provided with a rigorous program that includes in-depth, complex instruction, and fast-paced study related to Douglas County's academic standards. The course is available by application and acceptance into the Discovery Program.

### SCIENCE 7 (LIFE SCIENCE) (one year)

Life Science is the study of living organisms, their systems, and their interrelationships with each other and the environment. The application of the scientific method is used throughout the year while exploring activities and topics. The one year course is designed to investigate a variety of life science concepts and ideas including cells, genetics, natural selection, classification, bacteria, protists, fungi, plants, animals, ecosystems, and ecology.

### HEALTH 7 (one semester = 18 weeks)

This course will integrate health standards. Topics will include maintaining mental, social, and emotional health, nutrition, personal health and safety--including internet safety, communicable diseases, substance abuse, and puberty.

### PHYSICAL EDUCATION 7 (one semester = 18 weeks)

**Expenses:** Students are required to have a plain gray t-shirt, black athletic shorts, and athletic shoes which need to be tied. It is also advisable to have a gray sweatshirt and black sweatpants for cold or inclement weather. All physical education attire should not have writing or emblems. Tank tops and cut off shirts are not allowed. Students must also provide their own combination padlock.

The Physical Education Program is fitness-based with daily emphasis on flexibility, muscular strength, and cardiovascular exercise. **Activities include both team and individual sports.**

**Attention:** The Physical Education component, by its nature, includes a risk of injury to the participants which may range in severity from minor to long-term or catastrophic. Although serious injuries are not common in supervised physical education classes, it is impossible to eliminate risk. Students must obey all safety rules, report all physical problems to their teacher, follow prescribed programs, and act responsibly while in the class area. Since Physical Education will demand some strenuous activity, students enrolling in these classes should have a physical.