

7th Grade Course Synopsis

Mathematics

The grade 7 mathematics program includes the study of data analysis, probability and statistics, applications of decimals, fractions, proportions and percents, pre-algebra with integers and graphing, plane and solid geometry and a review of measurement concepts. An enriched program is offered in order to challenge the most capable of mathematics students. In addition to providing a more in-depth and rigorous study of the above concepts, the emphasis is placed on building a strong foundation in various algebraic concepts. It is the first of a two-year program that completes a full year of high school Algebra I by the end of grade 8. A resource program is offered to classified students. The program parallels the regular curriculum with modifications based on the implementation of the student's Individual Educational Plan

Goals:

- 1) To use a problem-solving approach which emphasizes the NCTM Standards
- 2) To develop the confidence, knowledge and techniques for using math to reason and solve problems in everyday life and be able to communicate mathematically
- 3) To help students value mathematics and its connections to all subjects

English

This course will continue to develop a basis in grammar, vocabulary and writing. The grammar component will include an emphasis on the development of sentence structures and essays. Literature exposure will focus on poetry, fiction and non-fiction. Students will participate in a series of writing workshops. Students will gain writing experience composing persuasive, informative, descriptive, personal, and explanatory essays in various workshops.

Goals:

- 1) To apply the five-step writing process
- 2) To write an essay free of grammar and logic errors
- 3) To create other ways to present a written report

An English resource program is offered to classified students. This program parallels the regular English curriculum with modifications based on the implementation of the student's Individual Educational Plan.

Enriched English

In this course, students build advanced writing skills through the application of grammar, usage, and content. The students will also participate in three novel studies, which include *The Girl Who Owned a City*, *Light in the Forest*, and other selected literature. During the novel studies, the class will emphasize key literary themes and topics presented in the novels through various writing extensions. The students will also work on vocabulary workshop.

Goals:

- 1) To communicate effectively both orally and through written language.
- 2) To identify and analyze major themes and motifs through written expression

Reading

In this course the focus is on the development of thinking and reasoning skills that extend the student's ability to read with independence and comprehension. Students are encouraged to recognize their own reading needs and their potential for growth, and to understand that these needs vary with the type of material being read. A reading resource program is offered to classified students. This program parallels the regular reading curriculum with modifications based on the implementation of the student's Individual Educational Plan. In addition to the literature-based method of teaching, a supplementary skills based approach is employed.

Goals:

- 1) To construct meaning from written text
- 2) To discover, clarify and evaluate ideas
- 3) To increase vocabulary through reading
- 4) To develop a sense of pleasure, satisfaction and curiosity through reading
- 5) To widen their scope of reading interests and materials
- 6) To employ comprehension strategies and skills

Science

Utilizing scientific method, this science course incorporates the study of physical, earth, life and environmental sciences into one full-year course. In the life science unit, students will gain an understanding of cell processes. In the physical science unit, students are introduced to energy. They identify the various forms and discover how each form changes into the other. In addition, they will study the states of matter and phase changes. Finally, touching on their knowledge of the periodic table, students will differentiate between elements, compounds, solutions and mixtures. In the earth science unit, students attempt to predict the weather. They will become meteorologists during this unit of study. The environmental unit will aid in student discovery of global warming and Earth's non-living resources.

Goals:

- 1) To provide a variety of classroom experiences and unit projects for the purpose of furthering knowledge and Comprehension
- 2) To encourage students to use critical thinking and problem-solving skills as developed through guided Experimentation
- 3) To develop decision making and inquiry skills, reflected by formulating usable questions and hypothesis planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results

Social Studies

In this course students become familiar with the origins of the United States as well as the structure of American government and their roles as present/future participants in a democratic society. Several areas are examined throughout the year: the Native Americans, the founding of the original 13 colonies, the American Revolution, the Constitution, as well as the branches of government. In addition, the duties, characteristics and responsibilities of citizens and their government, as well as the role of the United States in a global society, is reinforced by practical scrutiny of current United States political actions and activities throughout the world.

Goals:

- 1) To have students become aware of the growth of our country from 13 colonies to an independent nation
- 2) To have students become aware of the structure and functions of the three levels of government
- 3) To emphasize their roles as citizens now and in the future
- 4) To become aware of the reality of government in their lives by forming current events awareness

Physical Education

Our physical education (PE) and health program is an integral part of our student's experience. It provides an opportunity, through activity, for physical, mental, and social development as well and improvement of the individual to meet the challenges of daily life. It is our goal to maximize physical potential, intellectual growth, and leadership skills that will improve each student's quality of life. Our program is based on national standards that focus on the physically education student. A physically educated person:

- 1) Demonstrates competency and/or proficiency in many movement forms.
- 2) Applies movement concepts and principles to the learning and development of motor skills.
- 3) Exhibits a physically active lifestyle and maintains a health-enhancing level of physical fitness.
- 4) Demonstrates responsible personal and social behavior in PE class
- 5) Demonstrates understanding and respect for differences among people in physical activity settings.
- 6) Understands that physical activity provides opportunities for enjoyment, challenge, self-expression, and social interaction.

Mandatory attire: Students change into athletic clothing for PE class. They must wear a t-shirt, shorts, and athletic sneakers. In colder weather, please have sweatshirts (without hoods) and sweat pants. Students should keep roll-on or stick deodorant (**no aerosol** cans or perfumes allowed) in their lockers.

Health

Our **7th grade** health curriculum covers the following topics:

Mental and emotional health; Stress management skills; Preventative medicine and disease awareness; Physical fitness and the importance of fitness for wellness; Growth changes and puberty; Alcohol and problems alcohol causes

Goals:

- 1) To understand the principles of health promotion and wellness.
- 2) To apply health-related and skill-related fitness concepts and skills to develop and maintain a healthy, active lifestyle.
- 3) To acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality.
- 4) To acquire knowledge about alcohol and other drugs and medicines.
- 5) To learn how to apply knowledge learned to promote a healthy and active lifestyle.

Supplies needed for health class- notebook, folder, writing utensil

Concert Band

Students will have the opportunity to further develop and expand their musical ability in instrumental music. Students will be exposed to a variety of musical styles from classical to modern, rock and jazz.

Goals:

- 1) To develop a maturing wind and percussion sound
- 2) To further students and their ability to comprehend and apply the written language of music
- 3) To prepare students for scheduled performances

Choir

In this course students will have the opportunity to grow in their enjoyment and understanding of music by singing vocal scores that fit the technical level and voice range of the students. The repertoire will include a variety of styles including folk, popular and classical music.

Goals:

- 1) To increase the ability of students to perform two-part singing and introduce three- part harmony
- 2) To offer students the opportunity to study and perform a variety of choral arrangements
- 3) To increase the vocal range of students
- 4) To reinforce through performance vocal technique and diction
- 5) To prepare students for scheduled performances

World Languages

The seventh grade Spanish and French courses are the second installments in a three-year language program. The program's philosophy is to provide an emphasis in all four linguistic areas: listening, speaking, reading, and writing, as well as an overview of the culture and customs of the particular countries. Students meet daily in Spanish or French.

Goals:

- 1) To communicate at a beginning level in Spanish and French
- 2) To demonstrate an understanding of the interrelationship between language and culture

CYCLE PROGRAM

Art

In this course emphasis is given on art values, sensitivity to design, art criticism, creative problem solving, and the continuous process of attaining skills and striving toward individual performance and production. *This course meets every other day for one marking period. It is scheduled during the same period as the music courses.*

Goals:

- 1) To increase artistic awareness
- 2) To gain knowledge of the expressive media
- 3) To develop personal choice and confidence
- 4) To value art as an important realm of human experience
- 5) To produce art

Communications

This course focuses on the skills necessary for presenting an oral report. Students will receive instruction and guidance in the preparation, organization and planning, and delivery of their speeches.

The steps of organizing an oral report include:

- 1) Selection of topic
- 2) Researching information
- 3) Outlining of information
- 4) Creation of Signal Word Outline cards
- 5) Delivery techniques
- 6) Practicing and Peer Evaluation

Presentations will be enhanced by the effective use of an audio or visual prompt, such as Power Point. *This course meets every other day for one marking period. It is scheduled during the same period as the music courses.*

Goals:

- 1) To select interesting and informative information for an oral report
- 2) To plan a speech which effectively conveys desired information, and holds the audiences' interest
- 3) To practice delivery techniques which will enhance your report
- 4) To analyze and critique the effectiveness of speeches.

S.T.E.M. Cycle Course

The acronym **S.T.E.M.** stands for Science, Technology, Engineering, and Mathematics. The 7th grade S.T.E.M. cycle course integrates Science, Technology, Engineering and Mathematics into various activities during the marking period. The S.T.E.M. class engages students with project-based learning, encourages students to solve authentic problems, and asks them to work with others to build real solutions. The seventh grade students continue to follow the design process which is incorporated into discovery based activities. For the seventh grade S.T.E.M. class, Potential & Kinetic Energy is a central theme in the activities.

Goals:

1. To engage students using real life applications of science, technology, engineering, and mathematics
2. To allow students the opportunity to the experience the value of advanced planning and collaboration with others

Computers/Math

The computer/math course gives students the opportunity to use two distinct pieces of software linked to mathematics. Microsoft Excel allows students to input, manipulate, format, and present data in a variety of ways. Students are familiarized with the software and are then led though a series of projects whereby they interpret, input and present data in the most appropriate format (table, chart, or graph). The Geometer's Sketchpad is one of the most powerful geometric drafting programs available to schools. This software allows students to discover geometric properties much the way they have been discovered and developed though the centuries utilizing software rather than pencil compass and straightedge. Students will learn how to create and manipulate simple and complex geometric figures to illustrate a variety of mathematical properties and concepts. This course will allow students to see the connections among mathematic problem solving, computer software and real world applications. *This course meets every other day for one marking period during the same period as the music courses.*

Goals:

- 1) Provide additional opportunities for students to develop conceptual understating of mathematical concepts
- 2) Utilize computer programs to adapt math concepts to meaningful applications