

8th Grade Course Synopsis

Mathematics

In this course, students study arithmetic, with attention to both basic skills and structure, while focusing upon a sound development of the real number system. The properties of whole numbers lead into the rational numbers. Finally, the real numbers are studied through the use of equations, relations, and functions in preparation for the study of algebra. Also included is a study of geometry, percentages, problem solving, and statistics. Emphasis is placed on real-world applications and connections to other disciplines. Computer and calculator technologies are provided as vehicles for exploration of mathematical concepts. A resource program is offered to classified students. This program parallels the regular curriculum with modifications based on the implementation of the student's Individual Educational Plan.

Goals:

- 1) To become confident in one's own ability to do mathematics, learning to reason and communicate mathematically.
- 2) To become problem solvers who continue to develop the mathematical skill one needs to be successful in both life and career choices.

Enriched Mathematics

The 8th grade enriched program is a continuation of the 7th grade enriched program. It is the second of a two year program that completes a full year of high school Algebra I by the end of 8th grade. This course focuses strongly on algebra, emphasizing symbolic and graphical representation.

Goals:

- 1) To understand the basic structure of algebra.
- 2) To utilize deductive reasoning to establish algebraic relationships.
- 3) To utilize the language of mathematics and algebraic properties to define and solve problems.

Algebra 1B

This course and the KHS Algebra 1B offer the same curriculum. It is designed for those PRM students who are highly motivated and have thoroughly demonstrated the ability to compute as well as to think critically. These students have displayed the ability to understand complex mathematical concepts and perceive abstract relationships. Some of the topics included are real and rational numbers and their relationships, algebraic expressions and operations, linear and quadratic equations, simultaneous equations, and applications.

Goals:

- 1) To understand the basic structure of algebra.
- 2) To utilize deductive reasoning to establish algebraic relationships.
- 3) To utilize the language of mathematics and algebraic properties to define and solve problems.

English

This course is a writing-based curriculum that focuses on a continued appreciation of writing, as well as literature. Two novels and one play will be read during the duration of this course. In addition, there is an emphasis on the five-paragraph essay in various forms such as persuasive, cause/effect, problem/solution and expository writing. Students will also work on grammar and usage as well as GEPA preparation. 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.

Goals:

- 1) To communicate effectively oral and written language.
- 2) To prepare students for the Grade Eight Proficiency Assessment.

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 Pigman*, *To Kill a Mockingbird*, and *Hiroshima*. 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 GEPA preparation.

Goals:

- 1) To communicate effectively both orally and through written language.
- 2) To prepare students for the Grade Eight Proficiency Assessment.

Reading

In this course students build literacy skills as they progress through more challenging reading material. The purpose of the class is to help students reach their highest potential. An emphasis is placed on developing the active reading strategies during oral and silent reading. The students are challenged to improve their reading proficiency and develop the competence that characterizes an active reader. Students will be exposed to a variety of literature including novels, short stories, and fiction and non-fiction selections. A reading program is offered to classified students. This program parallels the traditional reading curriculum with modifications based on the implementation of the student's Individual Educational Plan. In addition to the literature-based approach, a supplemental skills-based approach is employed.

Goals:

- 1) To employ comprehension skills.
- 2) To increase vocabulary through reading.
- 3) To develop a sense of pleasure, satisfaction, and curiosity through reading.
- 4) To prepare students for the language arts section of the Grade Eight Proficiency Assessment.
- 5) To widen the student's scope of reading interests, and expand their awareness of authors and writing styles.

Science

This course incorporates the study of physical, earth/space and life science. Students will review and apply the scientific method by creating an original science exposition project. In the earth/space science unit students study the history of planet earth and geological events that have changed the earth's surface. During our unit of physical science students study the periodic table, chemical bonds, chemical reactions and sound and light waves. In the life science unit, students become acquainted with genetic principles and will make predictions regarding genetic outcomes by using probability. If time permits, students will analyze various frog adaptations while doing a frog dissection.

Enriched Science

This course follows the same curriculum as the regular science class; however, it challenges students to move at a faster pace and complete more tasks that require higher-level thinking.

Goals:

- 1) To provide a variety of classroom experiences and unit projects for the purpose of furthering knowledge and comprehension of scientific concepts.
- 2) To encourage students to use critical thinking and problem-solving skills as developed through guided experimentation.

Social Studies

The eighth grade curriculum is a continuation of the seventh grade study of American History. The course begins with the growth of railroads, giant corporations and major inventions, as well as the settlement of the West in the late 1800's. It continues through the age of immigration, women's suffrage, and America's emergence as a world power. Eighth grade students will be exposed to the study of major US events in the 20th century, including World Wars I and II, the Great Depression, and the Cold War. The political, economic and social changes of America during the 1900's will also be examined.

Goals:

- 1) To gain an understanding of American History from post Civil War to the present.
- 2) To gain an understanding of the importance of geography to the development of the United States.
- 3) To communicate political, economic, and social changes in America.

Physical Education

Students will develop an overall physical fitness and game skills and strategies in various activities. Emphasis is placed on lifelong skills

Goals:

- 1) To improve the strength, speed endurance, agility and flexibility of the student.
- 2) To understand the value of physical exercise and its role in developing body composition.
- 3) To improve the social and emotional development of the student.
- 4) To improve the student's knowledge of rules, techniques, and strategies as it pertains to specific sports.
- 5) To expose students to a variety of activities which will ultimately add in their search for lifetime leisure activities.
- 6) To expose the student to a variety of activities that will improve the cardiovascular system.
- 7) Through the use of cooperative games, the student will understand the importance of teamwork.
- 8) To have fun.

Health

This course focuses on problems that students will be faced with and which will directly affect them later in life. Topics covered in this course are Family Life, Mental Health, DARE, and Here's Looking at You 2000. These are approached in a manner that will help the student make decisions based on sound knowledge.

Goals:

- 1) To develop an understanding of the functions of the human body as it involves reproduction and growth.
- 2) To enhance awareness of safety and accident prevention.
- 3) To cultivate the strength of character needed to refuse drugs and demonstrate good decision-making abilities.
- 4) To understand the importance of abstinence in the prevention of STD's and HIV.
- 5) To develop good mental health habits.

World Languages

The Spanish and French courses are the third installment in a three-year language program. The program's philosophy is to provide an emphasis in all four communicative areas: listening, speaking, reading, and writing, as well as an overview of culture. Students meet daily in Spanish or French.

Goals:

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

Concert Band

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 provide the opportunity for students to audition for and participate in the North Jersey Area Band and New Jersey Region Band
- 3) To further students and their ability to comprehend and apply the written language of music.

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.

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.

Goals:

- 1) To increase aesthetic 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.

Technology

All 8th graders will experience the final phase of the middle school technology curriculum at this level. The curriculum is a combination of both basic technology theories and problem-solving activities. Students will work in pairs on one of the fourteen modules available through the technology lab. The modules are grouped into five clusters of knowledge: communications, transportation, construction, manufacturing and biotechnology. Each module is self-directed and includes hands-on activities, computer-driven lessons, quizzes and a career awareness component. *This course meets every day for one marking period during cycle period.*

Goals:

- 1) To sharpen the ability to succeed in a small group environment.
- 2) To develop an understanding of the technology vital to everyday activities.
- 3) To foster a broad awareness of potential career paths involving technology.
- 4) To provide a self-paced, student-centered, hands-on learning environment.

Computer Applications and Science

Reporting from the top of PRM is this 8th grade computer science weather class! PRM is now equipped with our very own weather station that records up to the minute data on the current conditions from the top of PRM. This course provides the 8th grade students access to “real-time” weather data not only from our school but also from across the United States. By utilizing the tools and activities on <http://achieve.weatherbug.com> and using their background knowledge of the fundamentals of weather from 7th grade science, students will be analyzing this data in order to develop and expand their knowledge of storms, weather patterns, weather parameters and forecasting. Using a SMART board, students will present a weather forecast for a state of their choice. They will also be asked to participate in reporting the current days forecast in the morning announcements. The program is accessible to students at home as well as school. It is not only a science tool but it incorporates other curricular areas such as math and geography. *This course meets every other day for one marking period during the same period as the music courses.*

Goals:

- 1) Increase familiarity of weather patterns and forecasting tools.
- 2) Utilize live weather information from Kinnelon and across the region as a learning tool to enhance and expand upon knowledge gained in science, mathematics and other curricular areas.

Visual and Performing Arts

In this course students experiment with and develop performance skills. Students will create and perform monologues and scenes. Students develop certain performances completed in an independent and collaborative format. *This course meets every other day for one marking period during the same period as the music courses.*

Goals:

- 1) To use the elements of visual and performing arts as they create their performances.
- 2) To develop spatial awareness by blocking their performances.
- 3) To critique performances of self and others.
- 4) To communicate with correct technical terms and vocabulary used in performances.
- 5) To understand and exhibit correct audience and performance etiquette.
- 6) To develop the confidence to performance in front of an audience.

Assessment

Using these various evaluation tools, teachers assess student progress per unit and marking period. The emphasis on assessing a student's progress is to discover which concepts, skills, and habits need to be reinforced. Assessment is both formative and summative. Students will receive grades based upon their cumulative progress in each subject area per marking period. Student Progress is assessed using multiple indicators. Assessment tools may include: Cumulative Exams Quizzes Running Records Self Assessments Portfolio Records Performance Based Assessments Projects Class Participation Homework Journals/Logs Daily Assignments.

Grading System

Students receive a report card four times a year. The following scale of grades is used to indicate the quality of work of each student:

A+ 98-100	B+ 88-89	C+ 78-79	D+ 68-69	F 0-59
A 93-97	B 83-87	C 73-77	D 63-67	X Excused
A- 90-92	B- 80-82	C- 70-72	D- 60-62	I Incomplete

Cycle Classes

O-Outstanding 90-100 S-Satisfactory 70-89 U-Unsatisfactory Below 70