

ROTOLO MIDDLE SCHOOL

Curriculum Overview

Grades 8

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Dear Parents,

This general overview of instruction in both the ACADEMIC and EXPLORATORY areas is provided to help you to understand your student's activities throughout this current school year. All students are also involved in an **Advisory** curriculum that centers around six "pillars of character", which are: Trustworthiness, Respect, Responsibility, Fairness, Caring, and Citizenship.

There have been many changes over the past few years in the way instruction is delivered to students. The structure of the school day is quite flexible. Very often, students receive their instruction through integrated lessons, i.e. a social studies project also becomes an LMC research assignment with a reading, writing, and technology component. This way as many as five different disciplines are used to complete one project.

RMS houses each grade level in a separate wing. Each grade is then divided into TEAMS of 60-90 students at the sixth grade level and 120-150 at the seventh and eighth grade level. Each team has BLOCKS of time during the day that are dedicated to academic or exploratory work. Your student will find many occasions when the academic and exploratory course work is also integrated, i.e., the interweaving of the study of Greece with the study of art/music.

Except for math at all grade levels, our classes are not tracked by academic ability. We have heterogeneous class groupings. At the 7th grade level, there is an advanced math class and an Algebra class for select students, and at the 8th grade level there are two levels of Algebra. All other students take the regular 7th or 8th grade math curriculum.

During their team meetings, teachers focus not only on lesson planning but on the learning and social needs of individual students. Every attempt is made to provide an excellent learning environment for our students.

You are encouraged to attend all co-curricular school events, to volunteer your service, share your talents, and to keep in close contact with your student's team. **YOU ARE ALWAYS WELCOME AT ROTOLO MIDDLE SCHOOL.** It is very helpful, however, if you let us know when you are coming to visit so that we might arrange our time to give you the time you need. We recognize that your child's education is a joint effort between home and school.

Sincerely,

Donald McKinney
Principal

Carol S. Weimer
Assistant Principal

Steve Maciejewski
Associate Principal

Eighth grade is an exciting year of CHANGE AND CHOICE. At this point in their academic “career”, most students should have achieved a significant level of personal responsibility and independence. Teachers clearly expect most students to follow directions, complete work on time, and cooperate productively in independent and team activities. Quality of work is important at every grade level. In eighth grade, however, the staff will demand a top quality product from each student according to the individual’s potential and competence.

MATHEMATICS

Moving Straight Ahead

Students study linear functions and relationships. They learn about rate of change (slope) and how to determine the slope of a line given any two points on the line. Also covered is learning to recognize a linear situation from its context, a table, graph, or an equation.

Looking for Pythagoras

Students explore the Pythagorean Theorem and irrational numbers. They learn to recognize relationships among the length of a side of a square, square roots and irrational numbers. The concepts of area, distance, slope, and rational numbers are reviewed in the book.

Say it With Symbols

In this book, order of operations, equivalent expressions, distributive property, commutative property, and solving equations are all studied. The students solve many problems in meaningful contexts. They investigate the meaning of symbolic expressions and operations and then share their findings with the class.

Samples and Populations

Students look at the topics of data analysis and statistics. They learn to make stem-and-leaf plots, along with histograms and box-and whiskers plots. Finally they revisit random samples and probability.

In the 8th grade, the students review basic mathematical skills in fractions, decimals, and percent. We also have a supplemented unit that focuses on formula geometry in preparation for the ISAT.

SCIENCE

Eighth grade students use the scientific method to observe, question, predict, evaluate and draw conclusions. The science program is essentially experiential in nature. The foci of the 8th grade PHYSICAL SCIENCE program is to further student interest in their physical environment; to recognize its relationship to themselves, and to give students the tools to work on scientific

problems independently. Students have the opportunity to work in fully equipped science laboratories. The CORE UNITS of study are:

1. Scientific Method
2. Chemistry Equipment and Lab Safety
3. Motion
4. Heat
5. Properties of Matter
6. Introduction to Particle Physics (Fermilab)

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SOCIAL STUDIES

Eighth grade builds upon the sequence of units studied in 6th and 7th grade. American History is used as both content and a vehicle to move students through the broad scope and sequence of Illinois State Standards. The standards are economic systems, history, political systems, geography, decision-making, and individual development and identity.

During 8th grade, students will study the following units:

The Progressive Era
World War I
The Jazz Age
Depression and New Deal
World War II
Cold War
Civil Rights and Women's Rights
The Kennedy and Johnson's Years
The Vietnam War-Present

LANGUAGE ARTS

1. All students will gather information through reading, listening, and viewing. Students will use MLA format, formulate research questions and strategies, locate and utilize library sources, and use book parts to access information
2. All students will be able to read and respond to literature, including novels, short stories, poetry, and non-fiction. Students will develop multiple skills and strategies for word development, comprehend written material within the various genres, and demonstrate an understanding of the literary elements.
3. All students will be able to gather information from non-fiction sources.
4. All students will communicate ideas and information through writing. Students will express ideas in narrative, expository, and persuasive form; apply standard conventions of grammar, usage, and punctuation; write for a variety of audiences having real world purposes, incorporate all aspects of process writing, and use feedback to revise composition content. Students will integrate literature and writing.
5. All students will be able to understand and apply the basic principles of oral

communication and listening. Students will communicate ideas clearly through speaking, develop speaking techniques for a variety of purposes and audiences, use a variety of formats in presenting information orally, and develop critical listening skills.

6. Vocabulary development

EXPLORATORY COURSES

Eighth graders choose their electives from the following choices. Some classes meet for a trimester and some for the whole year.

Advanced Communications: Middle school students watch a lot of television, but do they know how and why television exists? In this class students learn about the behind-the-scenes business of television. Students also get the chance to improve their formal public speaking skills by delivering speeches for real-life situations. Examples include eulogies and demonstration speeches.

Advanced Computer Applications: Students become business owners! They create a product or service and use the computer to complete real life applications, such as advertisements, budgets, databases, business cards, presentations and more. All profits are donated to charity.

Advanced Drafting: Students learn more about specific drafting concepts. Measuring in scale lengths, drawing 3-view and isometric objects, how to incorporate holes, slots, and angled surfaces, and how to draw screw threads are some of the major topics. An engineering project is also used to teach surface alignment.

Arts and Crafts: Watch out Disney!! It's 'toon time at RMS. Learn about animation and cartooning. Also make a really neat craft style art piece. This is commercial art at its best!

Basics Woods 1: Students attempt more complex woodworking projects and techniques. Instructions are more detailed and specific as to woodworking terms and a greater emphasis is placed on machine tool use. Projects range from baseball bats, to CD storage, to scroll sawed plaques.

Computer Media: Students explore the creative capabilities of multi-media computing by creating useful digital graphics, web art and video. They will record and edit their own movie.

Computer Programming and Robotics: Students learn to talk robot, computer and game language. Students use software similar to that used to control the Sojourner Rover Robot on Mars. They construct self controlled Lego Robots of their own design, then program them with Lego Language and Visual

Debate: What middle school student doesn't need to learn more about the fine art of argument? Debate is perhaps the most challenging form of oral communication. Students learn to support their opinions with evidence while participating in classroom debates on controversial issues of national importance.

Discovering Foods I: Students are provided with a basic foundation of foods, nutrition, and good health. By studying and understanding these facts, students can make better daily food choices to meet their needs.

Discovering Foods II: This class expands students knowledge about food and applies it to their daily life. Students learn advanced skills in food safety, recipe development, cake decorating, and grilling.

Drama: Are you feelin' lucky? You will be...if your child signed up for drama—the story of life. This exciting class explores the vital role that drama plays in everyone's life... especially an 8th grader's.

Drawing and Painting: Hey, get a picture frame ready! This is where totally awesome art is created. You get to do both-- Draw and Paint.

Emergency First Aid: Move over Clara Barton! Students who take this course will learn a variety of skills helpful in emergency situations. These skills include choking and breathing problems; cardiac emergencies and more! Students successfully completing this course will be Red Cross certified.

French: This course is the equivalent of French I at the high school. Students who successfully complete this class may continue in second year French. Reading, writing, speaking and listening skills are emphasized using the text and workbook Allez, Viens! French culture is also explored.

Introduction to Building Trades: This class explores aspects of wall framing and blueprint reading. Scale wall sections will be built. Proper layout procedures using tape measure, framing square, and hammer will be used. Students will learn about wall construction and framing. Strict safety procedures will be followed at all times. Safety glasses, hammer, and 25 foot tape measure are required.

Music Department: 8th grade performing ensembles include band, choir, and orchestra. These advanced ensembles strive to achieve the highest level of musicianship while performing an eclectic mix of classical and modern music. The 8th grade band will be marching in the Homecoming Parade on September 30th and performing in a “Masquerade Concert” on October 27th. They will also travel to Northern Illinois University for a clinic with Dr. Ronnie Wooten. The 8th grade chorus's first performance will be November 15th here at RMS. Students will be performing a variety of different pieces in both 3 and 4 part harmony. Students in chorus are eligible to audition and perform in both our Swing Kids and Jazz Choir. Eighth grade orchestra will be playing a challenging program for their first concert on November 1st. They will be playing Suite for Strings, Tchaikovsky Symphony #6 mvt. 2, and M to the 3rd Power. Eight graders are also eligible to play in the BYSE (Batavia Youth String Ensemble) by audition, which also has a challenging repertoire list for the first concert. Band, choir, and orchestra students, selected by audition, will also represent RMS by performing in the District IX IMEA festival on November 5th.

Physical Education: You might be hearing from your children how in PE we make them do a million push-ups, a zillion sit-ups, and of course run the marathon! The reality is, they're in training for the triathlon—and imagine that...we don't even have a pool! Besides training for the imaginary triathlon, students will learn the importance of lifelong fitness. Activities which promote fitness are: individual sports, team sports, skill development and cooperative learning. Good citizenship, sportsmanship, responsibility, accountability, and respect are developed throughout the year

Production Technology: Students will start up model companies. Each company will rotate through seven modules including electronics, robotics, bridge building, Co2 cars, T-shirt design, rockets, and Lego Dacta. Computers will be used as design tools and hands-on activities will promote creativity.

Sewing: Students will be able to expand their sewing skills by completing various projects such as quilting, knits, and fun-fur animals and pillows. They learn techniques which will aid them in the construction of selected projects.

Spanish: This course emphasizes learning to speak, read, write and understand basic Spanish. The student is guided from structured practice to open-ended, personalized communication. Students who successfully complete this course will be eligible to take Spanish II as freshmen.

Telecomputing: Students explore the basics of computer networking and how computers connect to the Internet. They then learn how to make web sites using both HTML source code and a Web Page Editor to become a web publisher.

3D Art: Enjoy the magic of putting your hands on a chunk of clay and creating!! Also learn to be a master of illusion by making flat things appear to be solid.

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