ROCHESTER COMMUNITY SCHOOLS

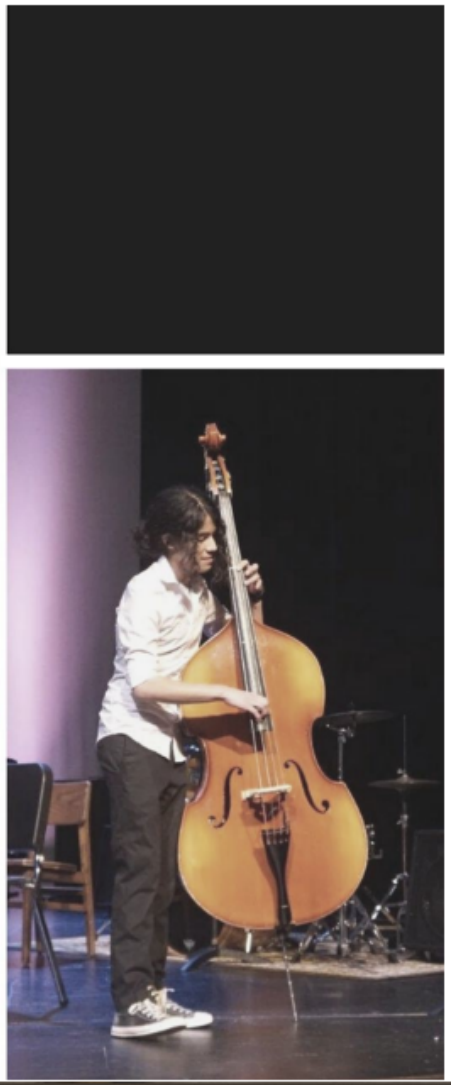
PRIDE IN EXCELLENCE

8TH GRADE VIRTUAL CAMPUS COURSE CATALOG

2022-2023

OUR MISSION

To provide a quality education in a caring atmosphere for students to attain the necessary skills and knowledge to become lifelong learners and contribute to a diverse, interdependent and changing world.



The teaching and learning at Rochester Community Schools is designed to develop innovative, self-directed learners who think critically, communicate effectively and persevere to positively impact the world.

We challenge our learners through dynamic cultural experiences, to be empowered global stewards, and inspire them to take what they learn and have a positive impact on their community, country, and world.

All sixth grade students are scheduled to take the following classes:

- Language Arts
- Mathematics
- Science
- Social Studies
- Electives

English Language Arts

Language Arts 8 - #VC1008

Language Arts 8 is based on the Common Core State Standards (CCSS) for eighth grade Language Arts. Students read and analyze narrative and informational text for structure and author's craft. Students apply comprehension and vocabulary skills in context. Using the writing process, students write narrative and expository pieces, including argumentative writing and research. In the context of writing, students correctly apply a variety of grammatical structures and correct spelling conventions. In large and small groups, students speak, listen and respond to one another through class discussions and oral presentations

Mathematics

Pre-Algebra - #VC4008

Pre-Algebra is based on the Common Core State Standards (CCSS) for eighth grade mathematics. Students solve multi-step equations and inequalities with real numbers (integers, rational and irrational numbers). Students write and solve problems involving proportions, ratio, and probability. Students write and graph linear equations and inequalities, linear and nonlinear functions, quadratic and exponential functions and use them to model real world situations. Students solve problems involving square roots and exponents. Students apply statistics and probability to design experiments and simulations. Students add, subtract and multiply polynomials.

Algebra I - #VC4164
Prerequisite: Successful completion of Accelerated Pre-Algebra 7 Students build on the concepts learned in Accelerated Pre-Algebra 7 and apply them to solving and graphing multi-step linear and nonlinear equations and functions. Students solve and graph linear inequalities and solve linear systems using a variety of methods. Students factor polynomials and solve quadratic equations and functions. Students solve radical equations and identify their connection to geometry. Students solve rational equations and graph rational functions. Students identify the probability of events and analyze and interpret data. (Students may be considered for Algebra 1 based on a placement test.)

Science

Science 8 - #VC6008
The RCS middle school science curriculum utilizes Mi-STAR and Modeling Instruction Pedagogy. This science curriculum is motivated by a vision for the future in which science is taught and learned as an integrated body of knowledge that can be applied to address societal issues. The dimensions of NGSS are sequenced across each year and between years to create a coherent progression that builds on students' prior knowledge and skills. Each bundle in the sequence is connected to a 21st-century theme that will serve as the basis for a Unit Challenge— a problem or issue that the students attempt to solve or address throughout the course of a unit. As students' progress through the curriculum, they repeatedly use the disciplinary core ideas, science and engineering practices, and crosscutting concepts of the middle school grade-band. The units build on one another in a coherent fashion, assuming prior knowledge from previous units. Units include solving problems dealing with astronomy, plate movement, climate/weather, climate change and the quality of our local water systems..

Social Studies

United States History - #VC7008
This course introduces students to the history of the United States from Colonial times through Reconstruction. The course is divided chronologically into eras. Students learn to place major events on a timeline and to analyze their causes and effects. Using primary and secondary sources, they explore time and place in nineteenth century America. They compare conflicting accounts of the past, both orally and in writing, and express informed judgments about significant events that shaped the nation. Using a variety of media, they compile, analyze and present historical data. Within their historical study of nineteenth century America, students deepen their understanding of major geographical themes and basic economic concepts. They also build their understanding of American government from an in-depth study of the United States Constitution and the evolution of the government it created during its first century.

Elective Courses

Eighth graders have two hours of each day for elective classes. Each elective is identified as either a full year or semester class. Students may choose either two year-long classes, four semester classes, or a combination of a full-year class and two semester classes.

Art - #VC5508

Length: Semester

Creativity is an important part of this course, and originality and self-expression are emphasized. Drawing, as well as creating two-dimensional and three-dimensional artworks that reflect knowledge of color, form and shape, are the basis of the projects for this course. Students critique their own work and the artwork of others.

Band - #VC5008

Length: Full Year

This course applies what has been learned previously to produce appropriate characteristic tone in all registers with an effective embouchure. When appropriate, students use vibrato. Students perform using proper phrasing, dynamics, and style of articulation. Students listen to and adjust pitch automatically. Students complete a compositional activity with specified guidelines. Using a variety of genre, students perform, listen, describe, and read music. Students learn and use accurate vocabulary to critique their own performance and the performances of others. Students are evaluated on performances that take place during class and after school.

Orchestra (String Instruments) - #VC5228

Length: Full year

Eighth Grade Orchestra is an instrumental music class that builds from skills learned in Seventh Grade Orchestra. Seventh Grade Orchestra (or equivalent) is a prerequisite for this course. While individual skills are still developed, ensemble skills are a focus of this course. Music skills, including tone production, posture, bow hold, bowing, note and rhythm reading, musical terms, intonation, and the performer's role in an ensemble are further developed. Students will learn shifting techniques to perform in new positions. Students will play a varied repertoire of music. There are several evening or weekend performances throughout the year. All performances are required and graded. Special concert attire may be required.

Choir - #VC5108

Length: Full Year

This class is open to all eighth grade students and is designed to develop vocal skills needed for group choral singing and performance. Students study proper vocal tone production, rhythmic accuracy and melodic and rhythmic precision. A variety of choral literature is studied and performed, along with studies of music theory. Students participate in a variety of concerts.

*Online Learning and Digital Citizenship - #990632

Length: Semester This one-semester course provides students with a comprehensive introduction to online learning, including how to work independently, stay safe, and develop effective study habits in virtual learning environments. Featuring direct-instruction videos, interactive tasks, and authentic, the course prepares students for high school by providing in-depth instruction and practice in important study skills such as time management, effective notetaking, test preparation, and collaborating effectively online. By the end of the course, students will understand what it takes to be successful online learners and responsible digital citizens. *This course is run through a self paced Edgenuity platform with an RCS mentor teacher*

Multimedia - #08808

Length: Semester

Students will identify various media formats and the importance of targeting an audience and delivering an intended message. Proper rules of online etiquette, ethics, and copyright law will be embedded into the curriculum. Students will utilize applications such as Google Apps for Education and the Microsoft Office Suite to work collaboratively to design and create a variety of multimedia presentations based on research topics of choice. Students will broaden their research strategies and skills while acquiring video, audio and photography editing skills to enhance presentations. Students will be exposed to current presentation formats as they become available. Presentation formats may include slides, video, websites, 8th Grade Course Catalog 6 podcasts or blogs with the option to utilize technology resources such as stop motion animation, interactive video and audio, and green screen technology in addition to the creation of printed materials

Physical Education - #VC3008

Length: Semester One third of the course is devoted to health-related fitness activities. Students are assessed on strength, flexibility and endurance. Students set fitness goals and monitor their progress throughout the semester. Students participate in selected activities for net/wall games, such as tennis and volleyball; target sports, such as archery and bowling; and invasion sports, such as soccer and basketball. Students develop skills and the attitude needed to live a physically active life. Students learn and apply the skills, strategies and rules for different group and individual sports that promote physical health. Students realize the importance of improving their flexibility, strength and endurance and how improvement in these areas improves performance in any sport.

STEM 8 - #VC8408

Length: Semester

This STEM (Science, Technology, Engineering, and Math) course exposes students to the fundamentals of manufacturing and production systems, energy and power systems and mechanical systems through hands-on activities, multimedia presentations, readings, and discussion. Using design processes, students design, lay out, construct and test solutions for given case studies such as constructing catapults, designing a hydraulic and pneumatic robot as well as other student created/driven projects in order to build a deeper understanding of how technological systems apply to their everyday lives.

World Language Level 1 (French #VC2314, German #VC2414, Spanish, #VC2814, Chinese #VC2614)

Length: Full Year

Students learn to communicate in a variety of situations, such as: listening, conversing, reading, writing, viewing and presenting. Students use language to gain understanding of people and cultures. (Students taking a Level 1 World Language course receive one credit towards the high school World Language graduation requirement.)

World Language Level 2 (French #VC2324, German #VC2424, Spanish, #VC2824, Chinese #VC2624)

Length: Full Year

PREREQUISITE: Level 1

The Level 2 courses build upon the skills acquired in the Level 1 courses. Students learn to communicate in a variety of situations through listening, reading, writing, conversing, viewing and presenting with increasing accuracy and complexity. Students use language to gain understanding of people and cultures. (Students taking a Level 2 World Language course receive one credit towards the high school World Language graduation requirement.)