8th Grade Math Syllabus

Course Details

Course Code: Course Code: 21100000 (Yearlong); 2100S100 (Semester 1); 2100S200 (Semester 2)

Subject: 8th Grade Mathematics

Required Prerequisites: Successful completion of 7th Grade Mathematics.

Suggested Prerequisites: None

Recommended Grade Levels: 8th Grade

Duration: Varies

Course Availability: A listing of when this course is offered in the current school year can be found on the VirtualSC Current Course Offerings page (opens in a new window).

Class Times: There are no scheduled class meetings for this course; however, to measure learning, students will complete self-checks, practice lessons, multiple choice questions, projects, discussion-based assessments, and live conferences with an instructor. Students are expected to maintain regular contact with teachers. Students are expected to work on their own to meet the deadlines posted in their course pacing guide. Students should expect to spend 7-9 hours a week working on this course independently, in addition to any live meetings.

Textbook: There is no textbook required for this course.

Required Course Materials: No additional materials required.

Outside Websites: A list of links to websites and online textbooks used in this course can be found here: VSC Course Links Document Folder (opens in a new window). Students will need to be able to access all of these links to access all course materials.

Final Exam: Students in this course take section A and section B comprehensive assessments.

Course Description

Students who love playing interactive games will love this course. Students experience intrigue and fun when they log in to Pre-Algebra. This hands-on course is full of animations, applications, videos, games, and real-world scenarios. The satisfaction students gain from truly understanding higher level concepts such as systems of equations and central tendencies encourages excitement and joy for learning they may have never experienced before.

The curriculum used in this course is guided by the [SC College- and Career-Ready Standards for Math Grade 8](#) (opens in a new window).

Scope and Sequence

Module 1: Real Numbers and Exponents
- The Number Line
- Exponent Rules
- Square and Cube Roots
- Scientific Notation
- Operations with Scientific Notation

Module 2: Geometric Transformations
- Translations
- Reflections and Rotations
- Congruent Figures
- Similar Figures
- Transversals
- Triangle Angles

Module 3: Geometric Relationships
- The Pythagorean Theorem
- Pythagorean Theorem Applications
- The Pythagorean Theorem on the Coordinate Plane
- Volume

Module 4: Functions
- Functions
- Comparing Functions

- The Linear Function
- Graphs of Functions

Module 5: Linear Relationships
- Graphs of Proportional Relationships
- Slope-Intercept Form
- Constructing Linear Functions
- Interpreting Linear Models
- Applications of Linear functions

Module 6: Patterns of Association
- Scatter Plots
- Line of Best Fit
- Interpreting Lines of Best Fit
- Frequency Tables

Module 7: Linear Equations
- Algebraic Properties and One-Step Equations
- Two-Step Equations
- Solving Linear Equations
- Equations with Variables on Both Sides
- Equations with Rational Coefficients

Module 8: Linear Systems
- Systems of Equations
- Solve by Graphing
- Solve by Substitution
- Solve by Elimination
- Applications of Systems

Students will be sent a full list of assignments and their due dates at the beginning of the course.

Current pacing guides for this course can be found on the [Current Course Offerings page](#) (opens in a new window) on the VirtualSC website.

Course Grades

Teachers will share course grading details for students at the beginning of the course term.

VirtualSC Details

Information on VirtualSC student guidelines, policies and technology requirements can be found in the VirtualSC Student Support Portal (opens in a new window).