



7th Grade Math Syllabus

Course Details

Course Code: Course Code: 11100000 (Yearlong); 1110S100 (Semester 1); 1110S200 (Semester 2)

Subject: 7th Grade Mathematics

Required Prerequisites: Successful completion of 6th Grade Mathematics.

Suggested Prerequisites: None

Recommended Grade Levels: 7^h 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

The curriculum used in this course is guided by the [SC College- and Career-Ready Standards for Math Grade 7](#) (opens in a new window).

Scope and Sequence

Advanced assessments are in italics. Students not taking the advanced course will skip these lessons and assessments.

Module 1: Rational Numbers

- The Number Line
- Adding and Subtracting Rational Numbers
- Multiplying Rational Numbers
- Strategies for Rational Numbers
- *Advanced: Irrational Numbers*
- *Advanced: Approximating Rational Numbers*

Module 2: Application of Rational Numbers

- Dividing Rational Numbers
- Converting Rational Numbers
- Rational Numbers in the Real World
- *Advanced: Exponents*
- *Advanced: Operations with Roots*
- *Advanced: Scientific Notation*
- *Advanced: Operations with Scientific Notation*

Module 3: Equations and Inequalities

- Expanding and Simplifying Expressions
- Applications of Expressions
- Equations
- Inequalities
- *Advanced: Linear Equations*
- *Advanced: Systems of Equations*

Module 4: Proportions

- Unit Rates
- Characteristics of a Proportion
- Proportionality and Equations
- Application of Ratios

- Applications of Percents
- *Advanced: Graphing Proportional Relationships*
- *Advanced: Slope-Intercept Form*

Module 5: Geometry

- Scale Drawings
- Angles and Triangles
- Circles
- 3-D Figures and Cross Sections
- *Advanced: Transformations*
- *Advanced: Congruency*
- *Advanced: Transformations and the Coordinate Plane*
- *Advanced: Transversals and Angles*

Module 6: Probability of Simple Events

- Understanding Probability
- Probability Models
- Data Observation
- *Advanced: Pythagorean Theorem*
- *Advanced: Applications of the Pythagorean Theorem*
- *Advanced: Pythagorean Theorem on the Coordinate Plane*
- *Advanced: Formulas*

Module 7: Probability of Compound Events

- Representing Sample Spaces
- Understanding Compound Events
- Probability Simulations
- *Advanced: Introductions to Functions*
- *Advanced: Understanding Linear Functions*
- *Advanced: Applications of Functions*
- *Advanced: Analyzing Functions*

Module 8: Statistics

- Samples and Inferences
- Statistical Variability and Comparing Populations
- Applications of Statistics
- *Advanced: Scatterplots*
- *Advanced: Line of Best Fit*
- *Advanced: Interpreting Lines*

- *Advanced: Frequency Tables*

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 \(opens in a new window\)](#).