

Fundamentals of Math

Mrs. Joelle Riethmiller

Yearlong Course 2023-2024

ELIGIBLE STUDENT:

Grade 7 and advanced grade 6: This course is designed to help students complete the transition from elementary computation skills into deeper mathematical understanding and more advanced mathematical concepts. At the end of the year, students should be prepared to progress into Pre-Algebra and beyond. Students enrolling in the class should have a solid understanding of operations with fractions and decimals. Students should be familiar with integers, ratios, percentages, the coordinate plane, number line, visual representation of data and basic geometric concepts.

REQUIRED TEXTS AND MATERIALS:

REVEAL Math Course 2 Student Bundle (Digital Subscription, Volume 1 and Volume 2 printed books)

REVEAL Math Course 2

- *Required texts are not included in the purchase of the course.
 - Personal Size Dry-erase Board with Markers
 - Three-ring Binder
 - Loose-leaf Filler Notebook Paper
 - Loose-leaf Filler Graph Paper
 - 5 Divider Tabs
 - Sharpened Pencils, Highlighter, Basic Set Colored Pencils/Crayons
 - Ruler with Customary and Metric Markings
 - Protractor
 - Additional materials and/or manipulatives may be requested by the instructor prior to a particular class session

Course Schedule

ORIENTATION SESSION:

The date and time of the student/parent orientation will depend on the particular section in which you are enrolled, but all orientation sessions will be scheduled during the week prior to the start of the class.

CLASS SESSION DATES: The dates of your class depend on the particular section in which you are enrolled. Consult the Scholé Academy <u>academic calendar</u> for details concerning scheduled, school-wide breaks.

OFFICE HOURS: Your teachers are available outside of scheduled class times! During "Office Hours" students may raise questions, seek assistance, or review class material. This can happen via email or a meeting in the Zoom classroom. Your teacher will do their best to respond within 24-48 hours; please keep in mind that they likely will not respond immediately to messages after 5 p.m. EST.

COURSE DESCRIPTION

As students transition from lower school into middle school, they will extend their foundational mathematics and computation skills to apply to higher levels of problem solving. They will begin to experience increasingly abstract mathematical concepts. They must gain a solid understanding of these concepts in order to be prepared for Pre-Algebra and beyond. This course will guide students through a variety of topics including:

- Positive and negative numbers
- Ratios, rates, and percentages
- Algebraic expressions, equations, and inequalities
- Area and volume of shapes and solid figures

In addition to the above topics, the instructor will strive to assist the student to deepen a love for learning and to appreciate the beauty of mathematics through his study of the subject. Both student and instructor will explore "the language with which God has written the universe" from its daily practical use to the wonder of the subject. The instructor is also passionate about addressing and alleviating math aversion and math anxiety and providing a positive, personal, and engaging learning environment that encourages growth in body, mind, and soul.

COURSE MAP

- > Proportional Relationships
- > Solve Percent Problems
- > Operations with Integers
- > Operations with Rational Numbers
- > Simplify Algebraic Expressions
- > Write and Solve Equations
- ➤ Write and Solve Inequalities
- **➣** Geometric Figures
- ➤ Measure Figures
- > Probability
- > Sampling and Statistics

STUDENT EXPECTATIONS: EXECUTIVE FUNCTION SKILLS

Students enrolling in Fundamentals of Math will demonstrate development of Executive Function Skills throughout the year as described below:

1. Engagement: An engaged student views class sessions as opportunities to learn from and with his instructor and classmates. He is polite and attentive, listens to the questions and answers of classmates, asks and answers questions for himself. This student is an active class participant who takes notes, engages in class discussions, follows instructions during class to participate in activities, and practices consistency and perseverance during LIVE class sessions.

*Note-taking is inherent to an engaged learner. These skills will be introduced, modeled, and practiced during this course to build a strong foundation for future mathematics classes and develop life-long learning.

- **2. Self-Control:** A student demonstrates self-control when he is on task during class sessions and does not allow distractions from other schoolwork, his environment, other people, and/or other websites or devices to interfere. This student also refrains from being a distraction to other students as well on video screen or microphone by contributing appropriately to the class visually and verbally.
- **3. Responsibility:** A responsible student is consistently prepared for class with the required materials and arrives promptly for his scheduled session. This student regularly checks the CANVAS page for class information and updates and is consistently communicating with his instructor regarding assignments, questions, and requests for assistance.
- **4. Initiative:** This student discerns his own understanding of a topic or assignment and seeks help from the instructor when necessary. He receives instructions and feedback from the teacher humbly and applies this to current and future assignments. He makes corrections and reviews the problem or assignment to reinforce the learning. This student utilizes the resources provided for his success in the class and, therefore, takes ownership of his learning.

STUDENT EXPECTATIONS IN ACTION

It is the student's responsibility to be an active and engaged participant during and in between class sessions. The student should consistently complete assignments and review lessons. The student should seek help and ask questions of the instructor during class and during office hour sessions.

The student is expected to:

- Arrive on time with required materials
- Attend the entire class with video enabled

- Mute and unmute microphone as requested by the instructor
- Participate actively during class sessions: orally and/or visually presenting answers, sharing methods for solving problems, explaining procedures, collaborating with classmates, etc.
- Listen attentively to instructor and classmates
- Embrace mistakes as learning opportunities and rework problems correctly
- Seek approved assistance (parent, older sibling, classmate) as necessary with assignments or projects
- Complete and submit all assignments by the due date and before the start of class sessions
- Complete assessments outside of the class to the best of his ability without the assistance of class notes, examples, or parental assistance
- No technology of any kind (including calculators) to complete assignments or assessments unless approved by the instructor

To be well-prepared to learn and participate in the lesson, the student MUST complete assignments prior to the start of it. If there are extenuating circumstances that prevent the student from completing an assignment, parents should contact the instructor via email prior to the class session to request an extension. Students turning in late work will not receive full credit. Students will submit their work by scanning their homework pages and uploading it into the Schoology assignment window as one PDF document. Photographs of completed assignments will not be accepted as they are incredibly difficult to read.

STUDENT GRADING AND EVALUATION

The interaction and conversation between student and instructor during class, on assignments and assessments, through CANVAS messages, and during office hours is imperative to communicating a student's level of mastery.

It is our goal within Scholé Academy to pursue restful learning, yet the instructor does with to provide clarity in the form of a grade on a Mastery Scale for assessments and the overall course. Based on his performance, a student will be placed in one of the following categories:

• Master - a student shows mastery of the material and/or concept 85 - 100%

Summa Cum Laude 95-100% Magna Cum Laude 85-95% Cum Laude 85-90%

- Journeyman a student demonstrates satisfactory understanding, but is encouraged to review the material and/or concept
 70 85%
- Apprentice a student will be encouraged to re-work the assignment or assessment and may be provided with additional practice, an invitation to an office hour session, and/or a parent/instructor meeting

STUDENT EVALUATION: ASSIGNMENTS, TYPES & WEIGHTS

The instructor will communicate with students through CANVAS to provide feedback and correction of assignments and assessments.

A student's mastery level and course grade will consist of:

- 1. LIVE Class participation
- 2. Daily Assignments
- 3. PIAT (Put It All Together) quizzes
- 4. MODULE Assessments
- 5. Projects and/or Performance Tasks

STUDENT EVALUATION: ACADEMIC INTEGRITY

Students will often take tests and/or quizzes privately at home. Students are on their honor to abide by Scholé Academy's Learning Philosophy which assumes the personal cultivation of Student-Virtues described in the Student-Parent Handbook.

We ask that parents proctor quizzes and tests to help keep their children accountable and the instructor requires a parent signature on MODULE assessments.

Specifically, cheating and plagiarism are punishable offenses. Copying the work of other students is prohibited. Unless otherwise noted, all assignments would be completed <u>without the use of a calculator</u>.

THE VIRTUAL CLASSROOM:

We will be using the free online "virtual classroom" software provided by Zoom. The live, interactive nature of our courses is foundational and we require cameras to be on during all class sessions. The virtual classroom will provide students with interactive audio, screen share and annotation in which texts, diagrams, video and other media can be displayed and analyzed. We will provide students with a link (via email) that will enable students to join the virtual classroom. Courses will be managed through our learning management system, CANVAS..

Specific information regarding the technology used by Scholé Academy (including required technology) can be found by visiting the <u>Technology in the Classroom</u> section of the Student Parent Handbook.

ABOUT THE INSTRUCTOR

Joelle Riethmiller believes true education impacts the body, mind, and soul of an individual through all subject areas and promotes personal and virtuous growth through life-long learning.

Mrs. Riethmiller received a BS in Mathematics-Mathematics Secondary Education from Grove City College (1999). While teaching seventh and eighth grade mathematics in public school, she earned a M-ED in Curriculum and Instruction from Gannon University (2002). Mrs. Riethmiller chose to step away from the classroom in 2003 to focus her attention on her young and growing family. In 2007, she embarked on the home education journey with her children. Years later as that journey continues, she still experiences the humbling beauty and depth of true continuous learning. She believes her 21 years of sacramental marriage, parenting and home educating her four children (2 high school graduates), and her personal faith journey have cultivated a desire to seek truth, beauty, and goodness in all aspects of life.

Mrs. Riethmiller strives to ignite a love for learning and desire for virtue in her students that extends beyond the study of mathematics. She is thrilled to participate in Scholé Academy's mission to cultivate student learning that endures.

Please note: While this syllabus addresses details specific to this course, it is not extensive. Parents should also read the Student-Parent Handbook located on <u>scholeacademy.com</u> and be familiar with the ideas, policies, and procedures outlined.