

Algebra I

Mrs. Danielle Bartko

Yearlong Course 2023-2024

ELIGIBLE STUDENT:

9th Grade, advanced 8th grade (10th-12th welcome): This course is designed for students who have successfully completed Pre-Algebra or its equivalent.

REQUIRED MATERIALS:

- Textbook: Reveal Math Algebra 1
 - Digital Textbook (purchase link will be provided during the summer)
 - Print Textbooks: <u>Textbook Vol 1</u> & <u>Textbook Vol 2</u> (these will be used to take notes during class time)
- <u>Mathematics for the Nonmathematician</u>: This text will be used to learn some of the related history and philosophy of the concepts covered.
- Digital tablet. Choose from: <u>Wacom Intuos</u>, <u>Huion</u>, <u>XP-Pen</u>, or <u>other</u>.
 - This will be used to write on <u>ziteboard.com</u>, a digital whiteboard. Please sign up for a free account, and have your child practice writing with a digital tablet before class begins.
- Pencils, notebook paper , graph paper, and ruler

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, schoolwide breaks.

Classes will take place on: Mondays, Wednesdays, and Thursdays: 2:00 p.m. EST (60-75 minutes - class will end between 3:00-3:15 p.m. EST) for 32 weeks and 95 classes on the following dates* September: 6, 7, 11, 13, 14, 18, 20, 21, 25, 27, 28 October: 2, 4, 5, 9, 11, 12, 16, 18, 19, 23, 25, 26, 30 November: 1, 2, 6, 8, 9, 13, 15, 16, [Thanksgiving Break], 27, 29, 30 December: 4, 6, 7, 11, 13, 14, [Christmas Break] January: [Christmas Break], 8, 10, 11, 15, 17, 18, 22, 24, 25, 29, 31 February: 1, 5, 7, 8, 12, 14, 15, [Winter Break], 26, 28, 29 March: 4, 6, 7, 11, 13, 14, 18, 20, 21, [Holy Week/Easter] April: 1, 3, 4, 8, 10, 11, 15, 17, 18, 22, 24, 25, 29 May: 1, 2, 6, 8, 9, 13, 15, 16, 20, 22, 23

*Please note the above dates and times are the anticipated class sessions for this course. However, all dates are subject to change as the instructor's circumstances might dictate (e.g. illness, family emergency, or church service). Any classes canceled by the instructor will be made up at an alternate time designated by the instructor.

OFFICE HOURS: Your teachers are available outside of scheduled class times! During "Office Hours" students may raise questions, seek assistance, or review class material. Students are welcome to stay in the Zoom classroom for an extra 15 minutes at the end of class for extra help. Students may also ask questions via Canvas inbox. 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, or over weekends.

ALGEBRA I COURSE DESCRIPTION

Algebra I serves as the foundation for all future mathematics and science courses. Students begin to formulate abstract algebraic generalizations from their concrete understanding of mathematics. Students will learn to solve problems using equations, inequalities, and graphs. Students will investigate linear relationships, translating those relationships into mathematical equations and then functions. Students will explore: simplifying algebraic and radical expressions, linear and nonlinear functions, exponents, polynomials, solving quadratic equations, data analysis, and probability.

ALGEBRA I COURSE MAP:

Semester 1:	Semester 2:
- Expressions	- Systems of Linear Equations and
 Equations in One Variable 	Inequalities
 Relations and Functions 	 Exponents and Roots
- Linear and Nonlinear Functions	- Exponential Functions
- Creating Linear Equations	- Polynomials
- Linear Inequalities	- Quadratic Functions
-	- Statistics

Students enrolling in this Scholé Academy course will be expected to show development of Executive Function Skills throughout the year. Executive Function Skills speaks to a set of qualities and skill sets students can develop and hone the better to approach the courses, lectures, readings, and teachers they will encounter in their future academic coursework.

Student expectations:

- 1. **An Engaged Student:** One who is willing to step into the arena of class discussion, ask questions, supply answers, and consider how the discussion at hand applies to oneself.
- 2. **Note Taking:** A student must be engaged with the class by taking notes on important and relevant content in an organized fashion. They should then independently consult those notes for assignments and in preparation for assessments. It is essential that all students acquire a notebook for use during the class, as this will keep them organized by subject.
- 3. **Attention to Detail & Preparedness:** These students are ones who consistently adhere to deadlines, submission requirements, adhere to style guides and codes, confirm technology is working prior to the start of class, are responsible to determine how to proceed after an absence, are responsible for consulting their course syllabus and adjusting as the class proceeds, etc.
- 4. **Critical Reflection:** These students are ones who receive feedback to their submissions, and then apply that feedback to future assignments rather than repeating mistakes. These students also glean information from the live class critiques of fellow students and learn from others what mistakes to avoid.
- 5. **Initiative/Maturity:** This student will be proactive in listening to the teacher's comments, assessing how they apply to his/her work, and taking the initiative to schedule office hours with the teacher if necessary.

STUDENT EXPECTATIONS IN ACTION

In this class, students will be expected to listen attentively, and participate actively in class discussions and practices. Students are expected to arrive to class on time and with all assigned material completed. The instructor will facilitate learning for the student, but the responsibility for staying up-to-date with classwork and assignments ultimately falls to the student.

During class time, students will review answers, pose questions, and explain and justify their answers and solutions. They will be required to take notes documenting the new content covered each class. Each week the teacher will lead discussions informed by issues and problems raised by students, as well as issues introduced by the teacher.

All assignments will be due into the appropriate Canvas Assignment folder prior to the start of class each day. Students turning in late work will earn a 10% penalty for each day the assignment is late. Late work will not be accepted after the 3rd day. Students will submit their work by scanning their homework pages and uploading it into the Canvas assignment window.

Assignments should be submitted as one PDF document. Photographs of completed assignments will not be accepted as they are incredibly difficult to read.

STUDENT GRADING AND EVALUATION

While pursing this course through Scholé Academy will be "restful", we also recognize the need to provide grades for students who will be using this course as part of their prepared college transcript. It's a delicate balance to achieve both restful learning and excellent academic performance. Earning a specific grade should not overshadow achievement goals for mastery of this discipline.

The student will be assigned the following grades to the student's level of achievement:

- *magna cum laude* (with great praise)
- *cum laude* (with praise)
- *satis* (sufficient, satisfactory)
- *non satis* (not sufficient)

Ideally, every average student working diligently should do praiseworthy work (*cum laude*). Those who excel beyond this expectation will receive *magna cum laude* for their efforts. Work which demonstrates minimal but sufficient mastery will be designated *satis*. *Non satis* designates work that demonstrates insufficient mastery; a student with a consistently *non satis* grade will not be recommended for continuation to the next level. Additionally, we will provide a transcript with a traditional percentage grade to the requesting parent at quarterly intervals. All students will receive both a Scholé evaluation and a percentage grade at the end of the year.

STUDENT EVALUATION: MASTERY PORTRAIT

Mastery portrait: Students who are prepared to take this class are typically early adolescents approaching young-adulthood. This developmental stage is an interesting one, brimming with lots of new characteristics. It's imperative, then, that this course not only provide the academic components necessary to achieve mastery of the content of the class (knowledge) and skills associated with analytical thought; but to also help engage the student in development of their moral virtues.

At the completion of this course, *cum laude* students will obtain a working knowledge of:

- Numerical and Algebraic expressions
- Distributive Property
- Absolute Value
- Solving multi-step equations and inequalities
- Using formulas
- Functions
- Graphing linear functions, inequalities, systems of equations

- Slope, rate of change, writing equations in slope-intercept form
- Arithmetic and geometric sequences
- Exponential equations and functions
- Factoring
- Quadratic equations
- Analyzing data

The teacher will communicate with students regarding assignment feedback and grading through the free online grading system, Canvas. The teacher will provide students with more detailed information and access to the course page.

Students' grades will have the following weight (out of 100):

Class Participation: 10
 Homework assignments: 60
 Tests: 30

The incremental nature of the assessments is in place to ensure that students are continually reviewing previous material.

Typically Speaking:

- magna cum laude is the grade range of 94% or above.
- cum laude is the grade range of 85-93%
- satis is the grade range of 75-84%
- non satis is any grade lower than a 75%

This reflects the student's mastery and ability to move on to the next level.

Students and their parents will receive quarterly feedback from their teachers in the form of a quarterly update.

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.

Specifically, cheating and plagiarism are punishable offenses. Copying the work of other students is prohibited and proper citation of all sources is essential.

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 and an interactive whiteboard 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

Danielle Bartko is an experienced Math and Science teacher, and Orthodox Church Cantor and Choir Director. She taught in public schools and a Montessori based Orthodox private school. She has served the American Carpatho-Russian Orthodox Diocese as a Cantor and Choir Director, and the Orthodox Church in America as a Choir Director. She spent countless summers at Camp Nazareth, first as a camper, and later as a counselor and chant teacher.



She holds degrees in Biology and Music from Lafayette College, and Secondary Teacher Certification from DeSales University. She has taught grades 5-12, and

currently homeschools her children. She has experience in a variety of teaching methods, and has taught students with diverse academic needs. She is a lifelong learner, and has enjoyed growing and changing as an educator over the years. Her goal is to inspire her students to become lifelong learners as well.

Her Liturgical music education comes from a variety of coursework in Orthodox Music and Choral Directing. She has taken classes through Christ the Saviour Seminary and the OCA Liturgical Music Department, and independent study with Very Rev. Protopresbyter Michael Rosco and Professors Paul Hilko, George Hanas, Andrew Talarovich, and Jerry Jumba. Whenever she travels and visits a church, she will sneak into the choir loft, wait for an invitation to sing with the choir, and then ask for copies of good music to keep as a souvenir.

She grew up in New Jersey, but now lives in Pittsburgh PA with her husband and two young daughters. When she is not homeschooling her children or teaching classes, she enjoys gardening, jigsaw puzzles, SRS Iconography classes, visiting with friends and family, and going to the beach.

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.