

4th Grade Math

MAT0400

Course Description

Fourth grade math promotes problem solving skills by teaching students how to add, subtract, multiply, divide, average, and write the value of multi-digit numbers. Students learn how to apply mathematical concepts to everyday life using decimals, fractions, estimation, probability, measurement (US and Metric), graphs, word problems involving making change with money, and basic geometry.

Rationale

Working with numbers is an important part of life. Students will learn how to manipulate numbers to help in various areas of life, from buying an item to measuring an object.

Prerequisite

3rd Grade Math

Biblical Integration Outcomes

- A. God used numbers for many things in Scripture. Students will realize the importance of knowing how to work with numbers.

Measurable Learning Outcomes

- A. Describe, understand, and interpret measurement.
- B. Collect, interpret, and display data to create and analyze graphs.
- C. Solve algebraic equations and expressions; explore and solve number patterns.
- D. Add, subtract, simplify, compare, and order fractions with like denominators.
- E. Read, write, identify, compare, and round decimals to the thousandths.
- F. Measure the perimeter and area of a shape.
- G. Identify polygons, quadrilaterals, various lines, and angles.
- H. Add, subtract, multiply, and divide multi-digit whole numbers.
- I. Identify the place value of each digit in a whole number through the millions place.

Course Materials

See LUOA's [Systems Requirements](#) for computer specifications necessary to operate LUOA curriculum. Also view [Digital Literacy Requirements](#) for LUOA's expectation of users' digital literacy.

The student will need access to general supplies such as printer paper, pencils, colored pencils, crayons, markers, and scissors.

This course makes use of third-party digital resources to enhance the learning experience. These resources have been curated by LUOA staff and faculty and can be safely accessed by students to complete coursework. Please ensure that internet browser settings, pop-up blockers, and other filtering tools allow for these resources to be accessed.

The following resource(s) are used throughout this course:

- Education City
- Reading Eggs
- RightNow Media

Note: Embedded YouTube videos may be utilized to supplement LUOA curriculum. YouTube videos are the property of the respective content creator, licensed to YouTube for distribution and user access. As a non-profit education institution, LUOA is able to use YouTube video content under the YouTube Terms of Service and the provisions of the TEACH Act of 2001. For additional information on copyright, please contact the [Jerry Falwell Library](#).

Course Grading Policies

The students' grades will be determined according to the following grading scale and assignment weights. The final letter grade for the course is determined by a 10-point scale. Assignments are weighted according to a tier system, which can be referenced on the Grades Page in Canvas. Each tier is weighted according to the table below. Items that do not affect the student's grade are found in Tier 0.

Grading Scale		Assignment Weights	
A	90-100%	Tier 0	0%
B	80-89%	Tier 1	25%
C	70-79%	Tier 2	35%
D	60-69%	Tier 3	40%
F	0-59%		

Course Policies

Students are accountable for *all* information in the Student Handbook. Below are a few policies that have been highlighted from the Student Handbook.

Types of Assessments

To simplify and clearly identify which policies apply to which assessment, each assessment has been categorized into one of four categories: Lesson, Assignment, Quiz, or Test. Each

applicable item on the course Modules page has been designated with an identifier chosen from among these categories. Thus, a Quiz on the American Revolution may be designated by the title, “1.2.3 Quiz: The American Revolution.” These identifiers were placed on the Modules page to help students understand which Honor Code and Resubmission policies apply to that assessment (see the Honor Code and Resubmission policies on the pages to follow for further details).

- **Lesson:** Any item on the Modules page designated as a “Lesson”
These include instructional content and sometimes an assessment of that content. Typically, a Lesson will be the day-to-day work that a student completes.
- **Assignment:** Any item on the Modules page designated as an “Assignment”
Typical examples of Assignments include, but are not limited to, papers, book reports, projects, labs, and speeches. Assignments are usually something that the student should do their best work on the first time.
- **Quiz:** Any item on the Modules page designated as a “Quiz”
This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Quizzes cover a smaller amount of material than Tests.
- **Test:** Any item on the Modules page designated as a “Test”
This usually takes the form of a traditional assessment where the student will answer questions to demonstrate knowledge of the subject. Tests cover a larger amount of material than Quizzes.

Resubmission Policy

Students are expected to submit their best work on the first submission for every Lesson, Assignment, Quiz, and Test. However, resubmissions may be permitted in the following circumstances:

- **Lesson:** Students are automatically permitted two attempts on a Lesson. The student may freely resubmit for their first two attempts without the need for teacher approval.
- **Assignment:** Students are intended to do their best work the first time on all Assignments. However, any resubmissions must be completed before the student moves more than one module ahead of that Assignment. For example, a student may resubmit an Assignment from Module 3 while in Module 4, but not an Assignment from Modules 1 or 2. High School students may not resubmit an Assignment without expressed written permission from the teacher in a comment.
- **Quiz:** Students may NOT resubmit for an increased grade.
- **Test:** Students may NOT resubmit for an increased grade.

If a student feels that he or she deserves a resubmission on a Lesson, Assignment, Quiz, or Test due to a technical issue such as computer malfunctioning, the student should message his or her teacher to make the request, and that request will need to be approved by a Department Chair.

Consequences for Violations to the Honor Code

Every time a student violates the Honor Code, the teacher will submit an Honor Code Incident Report. The Student Support Coordinator will review the incident and allocate the appropriate consequences. Consequences, which are determined by the number of student offences, are outlined below:

- **Warning:** This ONLY applies to high school Lessons and elementary/middle school Assignments and Lessons. These will be taken as a teaching moment for the student.
 - **Lessons:** A zero will be assigned for the question only.
 - **Elementary/Middle School Assignment:** The student must redo their work. However, they may retain their original grade.
- **1st Offense:**
 - **Lesson, Quiz, or Test:** The student will receive a zero on the entire assessment.
 - **Assignment:** The student will either:
 - Receive a 0% on the original assignment
 - Complete the Plagiarism Workshop
 - Retry the assignment for a max grade of 80%
- **2nd Offense:** The student will receive a zero and be placed on Academic Probation.
- **3rd Offense:** The student will receive a zero and the Faculty Chair will determine the consequences that should follow, possibly including withdrawal from the course or expulsion from the academy.

Scope and Sequence

4th Grade Math

Module 1: Multiple topics

Week 1: Place Value
Week 2: Numberline
Week 3: Commutative properties
Week 4: Addition/Exam

Module 2: Subtraction/Rounding

Week 5: Subtraction
Week 6: Subtraction
Week 7: Rounding
Week 8: Estimation/Exam

Module 3: Money/Graphs

Week 9: Making change
Week 10: Making change
Week 11: Graphs/Exam

Module 4: Multiplication

Week 12: Multi-digit multiplication
Week 13: Multi-digit multiplication
Week 14: Life and multiplication/Exam

Module 5: Division

Week 15: Basic division no remainder
Week 16: 3 digits by 1 digit no remainder
Week 17: Basic division with remainder
Week 18: Multi-digit long division
Week 19: Review/Exam

Module 6: Mean, Median, Mode, Range

Week 20: Mean, median, mode, range
Week 21: Mean, median, mode, range/Exam

Module 7: Fractions

Week 22: Comparing/Simplifying
Week 23: Ordering/Adding fractions
Week 24: Subtracting fractions
Week 25: Mixed numbers/Exam

Module 8: Probability/Decimals

Week 26: Probability
Week 27: Comparing/Reading Decimals
Week 28: Adding/Subtracting Decimals
Week 29: Algebraic equations/Patterns/Exam

Module 9: Measurement

Week 30: Metric/English Units
Week 31: Liquid Measurement/Quiz
Week 32: Perimeter
Week 33: Area/Exam

Module 10: Lines/Polygons

Week 34: Line/Line Segment/Ray
Week 35: Polygons/Quadrilaterals
Week 36: Reflection/Rotation/Translation