

# Consumer Math

## MAT-2000

2022 07/01/2022 to 06/30/2023 Modified 04/22/2022

### Course Description

Consumer Math is an elective course that covers topics related to basic mathematical skills, and then directs the student to apply those skills in real life situations and problems. The course will offer a review of basic skills related to math operations and properties. The student will learn how to apply math in a variety of ways in order to be a better-educated and informed consumer. Included in the course of study will be a survey of basic financial practices and computations that correlate to business and personal money management.

### Rationale

Consumer Math is a course to review basic math skills and use those skills for practical application. Mathematic skills are useful tools for everyday life.

#### Prerequisite

None

### Measurable Learning Outcomes

- A. The student will practice and apply basic mathematical operations.
- B. The student will investigate basic principles of personal financial literacy including jobs, wages, budgets, taxes, recreation and retirement.
- C. The student will explore the options for saving and credit and being responsible with debt and purchasing options.
- D. The student will explore and evaluate types of insurance, reasons for insurance, and saving and investing for the future.
- E. The student will explore business practices and pricing and then develop a plan for operating his/her own business.
- F. The student will apply basic principles for solving ratios and proportions in order to solve a variety of problems including unit scale and scale drawing.
- G. The student will investigate and apply principles of measurement and construction practices to solve problems.
- H. The student will explore the uses and measurements of data including collecting, displaying and evaluating data.
- I. The student will use established theorems and principles to solve for unknowns related to geometry and trigonometry.
- J. The student will explore topics related to retirement, social security, and other benefits.

### Course Resources

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.

This course makes use of third-party digital resources to enhance the learning experience. LUOA staff and faculty have curated these

resources. Students can safely access them to complete coursework. Please ensure that internet browser settings, pop-up blockers, and other filtering tools allow for these resources to be accessed. See Technologies and Resources Used in this Course below for a specific list.

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

## Scripture Attribution

- All Scripture quotations, unless otherwise indicated, are from the ESV® Bible (The Holy Bible, English Standard Version®), copyright © 2001 by Crossway, a publishing ministry of Good News Publishers. Used by permission. All rights reserved. May not copy or download more than 500 consecutive verses of the ESV Bible or more than one half of any book of the ESV Bible."

## Technologies and Resources Used in this Course

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

- RightNow Media

## Policies

Students are accountable for all information in the [Student Handbook \(https://www.liberty.edu/online-academy/wp-content/uploads/2021/11/LUOA-Student-Handbook.pdf\)](https://www.liberty.edu/online-academy/wp-content/uploads/2021/11/LUOA-Student-Handbook.pdf). Below are a few policies that have been highlighted from the Student Handbook.

## Course Grading Policies

The student's 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%		

In order for students to receive credit for a course, the following conditions have to be met:

- All semester exams and module tests have to be completed.
- All Tier 3 projects or papers have to be completed.
- Fewer than 10 zeros exist in the gradebook for blank submissions in a full credit course and 5 zeros for blank submissions in a semester course.

## 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.W -

Quiz: The American Revolution.” These identifiers were placed on the Modules page to help students understand which Resubmission and Honor Code policies apply to that assessment (see the Resubmission Policy and Honor Code Policy below 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 his or her 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. Students may freely resubmit for their first two attempts without the need for teacher approval.
- **Assignment:** Students should 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 a computer malfunction, the student should message his or her teacher to make the request.

## Honor Code Policy

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 offenses, are outlined below:

- **Warning:** This ONLY applies to high school Lessons and elementary/middle school Assignments and Lessons. Students should view these actions as learning opportunities.
  - **Lessons:** A zero will be assigned for the question only.
  - **Elementary/Middle School Assignment:** The student must redo his or her work; however, the student may retain his or her original grade.
- **1st Offense:**
  - **Lesson, Quiz, or Test:** The student will receive a 0% 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 maximum grade of 80%
- **2nd Offense:** The student will receive a 0% and be placed on academic probation.
- **3rd Offense:** The student will receive a 0% and the Director of Faculty will determine the consequences that should follow,

possibly including withdrawal from the course or expulsion from the academy.

## Materials Selection Policy

LUOA curates educational materials that are consistent with the school's philosophy; however, the fallen human condition depicted in literature (as in Scripture itself) is not always pleasant. Valuable works sometimes have objectionable or profane elements. Good books provide four (4) recognized values.

- They build godly attitudes and character traits.
- They deepen our social and cultural awareness.
- They strengthen our use of written language.
- They provide a lifelong source of enjoyment and relaxation.

In order to instill these values in students and fulfill the stated objectives of the school, all LUOA students are expected to read and study good books on a regular basis. Recognizing that materials designed for one level may not be appropriate for another, three (3) levels of criteria are applied:

- Elementary materials must contain no objectionable material,
- Objectionable elements in sixth through eighth-grade materials must be limited and must serve a specific educational purpose, and
- Objectionable content may be included in high school materials but must be outweighed by positive literary, curricular, and/or Christian values.

The curriculum department has approved required educational materials for students.

## Schedule

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### **Module 1: Basic Math Review**

Week 1: Basic Adding and Subtracting

Week 2: Decimal Numbers, Estimating and Comparing Numbers

Week 3: Addition and Multiplication Properties and Fractions

Week 4: More on Fractions and Decimals

### **Module 2: Personal Financial Literacy**

Week 5: Time Management

Week 6: Wages, Income, Expenses, Jobs and Careers

Week 7: Budgets, Personal Accounting, and Taxes

Week 8: Recreation and Retirement

### **Module 3: Financial Institutions, Credit Basics, and Managing Debt**

Week 9: Financial Institutions and their Services

Week 10: Credit and Being Responsible with Debt

Week 11: Credit Management and Biblical Ideas about Debt

Week 12: Consumer Rights and Responsibilities

#### **Module 4: Survey of Insurance and Investment**

Week 13: Basics of Insurance

Week 14: More on Insurance

Week 15: Saving and Investing

#### **Module 5: Math and Retail Sales**

Week 16: Retail, Pricing and Percent

Week 17: Business Math

Week 18: Project Quiz, Test and Semester Exam

#### **Module 6: Ratios, Proportions, Unit Rate, and Cost Analysis**

Week 19: Ratios and Rates

Week 20: Proportions

Week 21: Scale Factor, Unit Scale and Scale Drawings

#### **Module 7: Math in the Workplace**

Week 22: Standard Units of Measure

Week 23: Measurement and Conversions

Week 24: Construction Math

Week 25: More on Construction and Simple Machines

Week 26: Real Estate and Homeowners

#### **Module 8: Data Analysis and Statistics**

Week 27: Data and Deviations

Week 28: Representing Data

Week 29: Representing Data (continued)

Week 30: Data Analysis, Graphs and Misleading Data

#### **Module 9: Geometry and Trigonometry**

Week 31: Geometry, Angles and Triangles

Week 32: Triangles, Quadrilaterals and Polygons

Week 33: Two and Three Dimensional Objects

Week 34: Functions, Equations and Slope

**Module 10: Jobs, Leisure, Retirement, and Travel**

**Week 35: Retirement**

**Week 36: Social Security, Benefits and Assessment**