

COURSE PROPOSAL FORM



Alabama Transfers

SECTION 1 - To be completed by the institution submitting course for approval

Name of institution Alabama Community College System

Course prefix & number MTH 108 Course title Quantitative Reasoning

Semester credit hours 3 Does course have a laboratory? Yes No Lab contact hours _____

In what general academic area is this course being offered at your institution? (Select one of the following)

- Written Composition
- Humanities & Fine Arts
- Math & Science
- Social Science
- Other Area _____

Check all that apply:

Course description (including prerequisites) as it appears in official catalog.

- Initial submission
- Re-submission
- Course title/number change
- Course content change

This course is intended for students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take calculus). It provides a foundation in thinking quantitatively. An emphasis is placed on real-world applications. Topics include mathematical reasoning, data interpretation, problem-solving strategies, equation solving, number sense, probability, counting principles, geometric applications, and measurement.

NOTE: YOU MUST ALSO ATTACH OR PROVIDE A HARD COPY OF A "REPRESENTATIVE COURSE SYLLABUS TO THIS FORM.

Contact information of person submitting this proposal (name position, mailing address, telephone number and email address required)

Chantae Calhoun
chantae.calhoun@accs.edu

Signature of person submitting this proposal: Chantae M. Calhoun Date 1/22/2026

SECTION 2 - To be completed by the AGSC/STARS Office and/or Area Academic Committee Chair

Reviewed and voted on by the following committee: AREA I&II AREA III AREA IV

Committee recommendation: Recommended for approval Not Recommended for approval

Voting Results: 17 # of YES votes 5 # of NO votes 6 # not voting/abstaining

Selected area of approval:

- Area I - Written Composition
- Area II - Humanities & Fine Arts
- Area III - Math & Science
- Area IV - History & Social Science

If NOT recommended, please give explanation:

Signature of Committee Chair (or Executive Director): Shanna Nichols for Keith Date 4/22/2026

SECTION 3 - To be completed by the AGSC Chair or Executive Director

AGSC APPROVAL:

- Approved
- Not Approved
- Tabled -- If tabled provide reasoning: _____

AGSC APPROVAL STAMP

AGSC Chair: _____ Date _____

For more information visit... www.alabamatransfers.com

AFTER SECTION 1 (ABOVE) IS COMPLETE, MAIL FORM AND COURSE SYLLABUS TO:

ALABAMA TRANSFERS
1101 SOUTH BRUNDRIDGE ST.
ELC BUILDING - SUITE 107F
TROY, AL 36081

THE ALABAMA TRANSFERS OFFICE STAFF WILL SEND OUT THE PROPOSAL TO THE APPROPRIATE COMMITTEE AND, IF RECOMMENDED FOR APPROVAL, WILL THEN BRING THE COURSE BEFORE THE AGSC FOR A FINAL VOTE.



Alabama Community College System

MTH 108 Quantitative Reasoning

I. MTH 108 Quantitative Reasoning—3 Semester Hours

II. Course Description

This course is intended for students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take calculus). It provides a foundation in thinking quantitatively. An emphasis is placed on real-world applications. Topics include mathematical reasoning, data interpretation, problem-solving strategies, equation solving, number sense, probability, counting principles, geometric applications, and measurement.

III. Prerequisite

None

IV. Textbook

Due to the varied selection of quality college-level textbooks, each college will select the textbook needed to meet the requirements of this course.

Suggestion: Math in Our World by Dave Sobecki (McGraw Hill)

V. Course Learning Outcomes

By the end of the course, students will be able to:

1. use mathematical reasoning to solve real-world problems;
2. interpret data and arrive at reasonable conclusions;
3. solve and apply proportions and linear equations;
4. perform numerical operations;
5. compute probability and apply counting principles;
6. apply select geometric concepts; and
7. differentiate, convert, and apply systems of measurement.

VI. Course Outline of Topics

1. Problem-solving procedures and strategies, rounding and estimation, and determining the reasonableness of answers to real world problems
2. Introduction to statistics including organizing, describing, and interpreting real world data, using various charts and graphs, and calculating and interpreting the range and measures of central tendency
3. Integers, absolute value, and using order of operations to correctly perform calculations involving integers
4. Integer exponents, scientific notation, rules of integer exponents, and using scientific notation in solving application problems
5. Solving linear equations, including real world applications
6. Ratios and proportions including representing ratios as fractions and solving application problems involving proportions
7. Percents including converting between fraction, decimal, and percent forms of a number, solving problems involving percents such as percent increase or decrease, and evaluating the validity of claims involving percents
8. Financial literacy including calculating take-home pay and tracking expenses, preparing a budget, saving for long-term expenses, and calculating simple interest
9. Introduction to probability including basic theoretical and empirical probability, tree diagrams, the fundamental counting principle, and factorial notation
10. Problem solving involving basic geometric and trigonometric concepts including the Pythagorean Theorem, special right triangles (30-60-90 and 45-45-90), and basic trigonometric ratios
11. Measurement including fundamental definitions, standard systems, converting within and between systems, and application problems including implications of improperly converting within and between systems

VII. Evaluation and Assessment

Grades will be given based upon A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

It is the official policy of the Alabama Community College System and entities under its control, including all Colleges, that no person shall be discriminated against on the basis of any impermissible criterion or characteristic, including, without limitation, race, color, national origin, religion, marital status, disability, sex, age, or any other protected class as defined by federal and state law. (ACCS Policies 601.02 and 800.00)

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the *Americans with Disabilities Act* of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College.