



**COLORADO**

Department of  
Higher Education

[Use this new form starting January 6, 2025](#)

# GT Pathways Curriculum

## Course Submittal Form and Institutional Verification

Content Area: Mathematics (GT-MA1)

Subcategory: **None**

Date: \_\_\_\_\_

Institution: \_\_\_\_\_

### Section I: Mathematics Content Criteria - **GT-MA1**

The following required [MA1 content criteria](#) shall be either: 1) *copied and pasted verbatim* into each instructor's syllabus, OR 2) *mapped* to the institution's own content criteria in each instructor's syllabus:

- a) Demonstrate good problem-solving habits, including:
  - Estimating solutions and recognizing unreasonable results.
  - Considering a variety of approaches to a given problem and selecting one that is appropriate.
  - Interpreting solutions correctly.
- b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.
- c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.
- d) Apply mathematical concepts, procedures, and techniques appropriate to the course.
- e) Recognize and apply patterns or mathematical structure.
- f) Utilize and integrate appropriate technology.





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## Section II: Competencies & Student Learning Outcomes for **GT-MA1**

The following Student Learning Outcomes (SLOs) for the required GT-MA1 competency, *Quantitative Literacy*, shall be either: 1) *copied and pasted verbatim* into each instructor's syllabus, OR 2) *mapped* to the institution's own competencies and SLOs in each instructor's syllabus.

### Quantitative Literacy:

1. **Interpret Information**
  - a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
2. **Represent Information**
  - a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
3. **Perform Calculations**
  - a. Solve problems or equations at the appropriate course level.
  - b. Use appropriate mathematical notation.
  - c. Solve a variety of different problem types that involve a multi-step solution and address the validity of the results.
4. **Apply and Analyze Information**
  - a. Make use of graphical objects (such as graphs of equations in two or three variables, histograms, scatterplots of bivariate data, geometrical figures, etc.) to supplement a solution to a typical problem at the appropriate level.
  - b. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level.
  - c. Make judgments based on mathematical analysis appropriate to the course level.
5. **Communicate Using Mathematical Forms**
  - a. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).
6. **Address Assumptions (*required of Statistics courses only*)**
  - a. Describe and support assumptions in estimation, modeling, and data analysis, used as appropriate for the course.





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## Section V: Institutional Verification

1. I verify that the courses listed above are part of our institution's general education core.
2. I verify that the courses listed above are offered at least once every two years (for CCCS, offered at a campus in the System).
3. I verify that course instructors are uniformly and consistently directed to include the required GT Pathways content criteria and competencies/Student Learning Outcomes, and that our institution will make a good faith effort to ensure faculty have the necessary resources to teach these content criteria and competencies.
4. I verify that instructors of these courses will be/have been directed to include the following statement in their course syllabi:

*The Colorado Commission on Higher Education has approved [course prefix & number] for inclusion in the Guaranteed Transfer (GT) Pathways program in the [GT-XXX] category. For transferring students, successful completion with a minimum C- grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, please visit the [Colorado Department of Higher Education website](#).*

Chief Academic Officer:

\_\_\_\_\_

Printed Name

\_\_\_\_\_

Signature

\_\_\_\_\_

Date