**GT-MA1: Mathematics**

**Required Syllabus Information**

Effective Implementation date: Spring 2018, 201830

The text in red font is explanatory and should not be included in syllabi. The text in black font is required in every instructor’s syllabus per State Board for Community Colleges and Occupational Education (SBCCOE) and Colorado Commission on Higher Education (CCHE).

**Course Prefix and Number:**

**Course Title:**

**Course Credits:**

**Course Description:** [from CCNS; you may add language but you may not subtract]

**Guaranteed Transfer (GT) Pathways Course Statement:**

The Colorado Commission on Higher Education has approved [*insert course prefix & number*] for inclusion in the Guaranteed Transfer (GT) Pathways program in the GT-MA1 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, go to <https://highered.colorado.gov/academics/transfers/gtpathways/curriculum.html>.

**GT-MA1: MATHEMATICS CONTENT CRITERIA**

[*the Content Criteria shall be either copied from here and pasted into the syllabus or mapped to the CCNS Required Course Learning Outcomes*]

Students should be able to:

1. 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.
2. Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas.
3. Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style.
4. Apply mathematical concepts, procedures, and techniques appropriate to the course.
5. Recognize and apply patterns or mathematical structure.
6. Utilize and integrate appropriate technology.

**GT-MA1 COMPETENCY & STUDENT LEARNING OUTCOMES**

[*the Competencies & Student Learning Outcomes shall be either copied from here and pasted into the syllabus or mapped to the CCNS Required Course Learning Outcomes*]

***Competency: Quantitative Literacy:***

Students should be able to:

1. **Interpret Information**
   1. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
2. **Represent Information**
   1. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
3. **Perform Calculations**
   1. Solve problems or equations at the appropriate course level.
   2. Use appropriate mathematical notation.
   3. 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**
   1. 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.
   2. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level.
   3. Make judgments based on mathematical analysis appropriate to the course level.
5. **Communicate Using Mathematical Forms**
6. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).
7. **Address Assumptions** *(required of Statistics courses only)*
   1. Describe and support assumptions in estimation, modeling, and data analysis, used as appropriate for the course.

***Competency: Problem Solving:***

\*Note: Mathematics faculty identified the Problem Solving competency for future adoption. You may use it if you wish but it is not required. The competency and associated Student Learning Outcomes are available at: <https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/Competency/Competency_Problem_Solving_CCHE_approved.pdf>

**REQUIRED COURSE LEARNING OUTCOMES**

[*copy and paste the CCNS Required Course Learning Outcomes here*]

**REQUIRED TOPICAL OUTLINE**

[*the Required Topical Outline shall be either copied and pasted from CCNS or integrated within the assignment schedule*]

**LEGAL COMPLIANCE**

[*CCCS requirements are forthcoming; contact your VPI/CAO for specific college requirements*]

**\*\*\*END REQUIREMENTS\*\*\***

**The links to source documents below are provided for your information only:**

GT Pathways Content Criteria: Mathematics: <https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/Content/Content_MATH_2016_06_02_CCHE_approved.pdf>

GT Pathways Competency: Quantitative Literacy: <https://highered.colorado.gov/Academics/Transfers/gtPathways/Criteria/Competency/Competency_Quantitative_Literacy.pdf>

New GT Pathways Review/Approval Process (October 20, 2016): <https://highered.colorado.gov/Academics/Transfers/gtPathways/New_GT_Pathways_Announcement_from_CDHE.pdf>

GT Pathways General Education Curriculum: <https://highered.colorado.gov/Academics/Transfers/gtPathways/curriculum.html>