**Course Number & Title or Degree Program Name:**

**Indicate if this is: ☐ a course, or ☐ a degree program**

**Overview:**

Foothill College’s General Education curriculum provides students with a well-rounded education, fostering critical thinking, communication, and interdisciplinary understanding. Faculty play a central role in ensuring GE courses align with these goals and prepare students for academic, professional, and civic success.

This form guides instructors in demonstrating how their course meets the learning outcomes for its designated GE area. Instructors should explain how their course develops analytical and communication skills, integrates diverse perspectives, and fosters interdisciplinary connections. Your contributions help maintain a rigorous and relevant GE curriculum that supports student achievement.

**Breadth Criteria:**

Foothill College’s General Education curriculum equips students with broad and deep knowledge, preparing them to be independent thinkers and engaged members of a diverse society. GE courses encourage intellectual curiosity, interdisciplinary exploration, and critical engagement with the world.

Students gain exposure to a range of disciplines, including the arts, humanities, natural sciences, social sciences, and mathematics. This breadth fosters connections across fields and deepens understanding of cultural, social, and physical environments.

All GE courses emphasize critical analysis and ethical reasoning, challenging students to evaluate complex issues, articulate perspectives, and engage thoughtfully with diverse viewpoints. The curriculum also promotes equity, inclusion, and global awareness, ensuring students are prepared to contribute meaningfully to an interconnected world.

A completed GE pattern enables students to acquire, apply, and demonstrate competence in essential academic and professional competencies.

**Depth Criteria for Area 2 - Mathematical Concepts & Quantitative Reasoning:**

Courses in Mathematical Concepts & Quantitative Reasoning equip students with the skills needed to understand and analyze numerical, graphical, and symbolic information. These courses emphasize mathematical reasoning, problem-solving, and the ability to apply quantitative concepts to real-world contexts. Students develop competencies in interpreting data, identifying patterns, and solving problems using mathematical models and tools.

The curriculum promotes logical thinking, precision, and accuracy, enabling students to make informed decisions in academic, professional, and everyday situations.

### **Instructions for Mapping Course Components to Criteria**

Please follow the steps below to demonstrate how your course (or degree program) fulfills the Breadth and Depth criteria for General Education Area 2 - Math Concepts & Quantitative Reasoning. Use specific components from the Course Outline of Record (COR), such as course outcomes, expanded content, methods of instruction/evaluation, and/or lab content.

If mapping a degree program, please indicate from which course in the sequence you are sourcing COR components.

### **Breadth Mapping**

For each of the following competencies, indicate if and how your course or degree program meets the requirement and provide corresponding course component(s) from the COR.

1. **Communication**  
   Analytical reading, writing, speaking, and listening skills, including evaluation, synthesis, and research.
   * Matching course component(s):
2. **Computation**  
   Application of mathematical concepts or principles of data collection and analysis to solve problems.
   * Matching course component(s):
3. **Critical Expression**  
   Clearly and precisely express ideas in a logical and organized manner using discipline-appropriate language.
   * Matching course component(s):
4. **Community and Global Awareness**  
   Consideration of one's role in society at local, national, and global levels in the context of cultural constructs and historical/contemporary issues.
   * Matching course component(s):
5. **Information and Digital Literacy**  
   The set of integrated abilities that includes: the reflective discovery of information, the understanding of how information is produced and valued, the use of information in creating new knowledge, the ethical participation in communities of learning, and the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.
   * Matching course component(s):

### **Depth Mapping**

#### **Mandatory Depth Outcomes**

Your course must address all the following outcomes. For each outcome, map the corresponding course component(s) from the COR.

1. **Mathematical Reasoning**Apply mathematical reasoning to analyze and solve problems using numerical, graphical, or symbolic methods.
   * Matching course component(s):
2. **Data Analysis and Interpretation**Read, interpret, and analyze data presented in various forms, including graphs, charts, and tables.
   * Matching course component(s):
3. **Application of Quantitative Methods**Use quantitative methods to model real-world situations and predict outcomes.
   * Matching course component(s):
4. **Logical and Systematic Problem-Solving**Develop logical and systematic approaches to problem-solving, including identifying goals and constraints.
   * Matching course component(s):
5. **Communication of Quantitative Ideas**Clearly express quantitative ideas and solutions using appropriate mathematical language and notation.
   * Matching course component(s):

#### **Optional Depth Outcomes**

In addition to the mandatory outcomes, your course or sequence must address **at least two** of the following outcomes. For each selected outcome, map the corresponding course component(s).

1. **Technology in Quantitative Reasoning**Use current technologies and tools for quantitative analysis and problem-solving.
   * Matching course component(s):
2. **Interdisciplinary Application**Apply mathematical concepts and reasoning to solve problems in other academic disciplines.
   * Matching course component(s):
3. **Limitations of Mathematical Models**Recognize the limitations of mathematical models and methodologies in solving complex problems.
   * Matching course component(s):
4. **Critical Evaluation of Data**Assess the reliability, validity, and significance of data used in quantitative arguments.
   * Matching course component(s):
5. **Ethics in Quantitative Analysis**Evaluate the ethical implications of quantitative analysis and data presentation.
   * Matching course component(s):

**Submit your completed form to your Division Curriculum Reps**

Requesting Faculty: Date:

Division Curriculum Rep: Date:

**FOR USE BY CURRICULUM OFFICE:**

Approved: Denied: CCC Co-Chair Signature: Date:

### **Degree Program Addendum**

If you are submitting a complete degree program (sequence of courses) to fulfill the requirements for this General Education Area, please provide a justification for why a sequence is being proposed instead of a single course. This justification must clearly demonstrate how the sequence, taken as a whole, meets the **Breadth** and **Depth** criteria outlined for this area.

The justification should also touch on how the sequence of courses:

**Integrates learning outcomes** (The sequence is designed as a cohesive program where learning outcomes are distributed across courses to achieve the required breadth and depth.)

and provides

**Progressive development** (The sequence builds skills or knowledge progressively, with later courses dependent on foundational learning established in earlier ones.)

#### **Instructions for Mapping Degree Programs**

1. Identify which courses in the sequence address specific **Mandatory Depth Outcomes** and **Optional Depth Outcomes**.
2. Provide a clear explanation of how each course contributes to fulfilling the **Breadth** criteria, noting any overlaps or unique contributions within the sequence.
3. Ensure the justification highlights the interdependence and integration of the courses within the sequence.

***Example:****Course A introduces foundational concepts in literature and philosophy, addressing Depth Outcomes 1 and 3. Course B expands on these foundations through artistic and historical analysis, addressing Depth Outcomes 2, 4, and 5. Together, the sequence fulfills all mandatory outcomes and optional outcomes 1 and 3.*

**Your Response:**