

# Quantitative Reasoning Attribute



# Today's Facilitators

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# GE Curriculum

## Entry Courses

  
**Intro to GE Experience**  
1 unit

  
**Foundations**  
9 units (variable)

## Core Courses

  
**Exploring Perspectives**  
12 units

  
**Building Connections**  
9 units

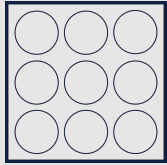
## Exit Course

  
**Portfolio**  
1 unit

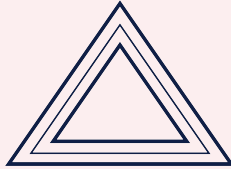


# Gen Ed Attributes in Core Courses

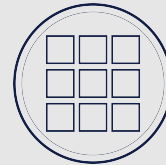
*Attributes are attached to Core Courses, enabling students to pursue academic and professional interests while also gaining a significant breadth of disciplinary and interdisciplinary perspectives.*



Diversity & Equity



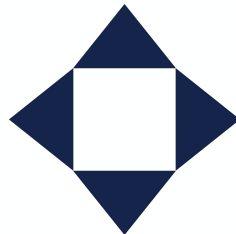
Quantitative Reasoning



World Cultures & Societies



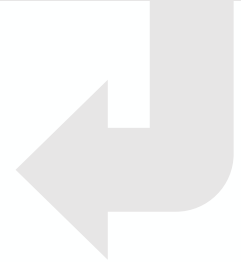
Writing



Exploring Perspectives



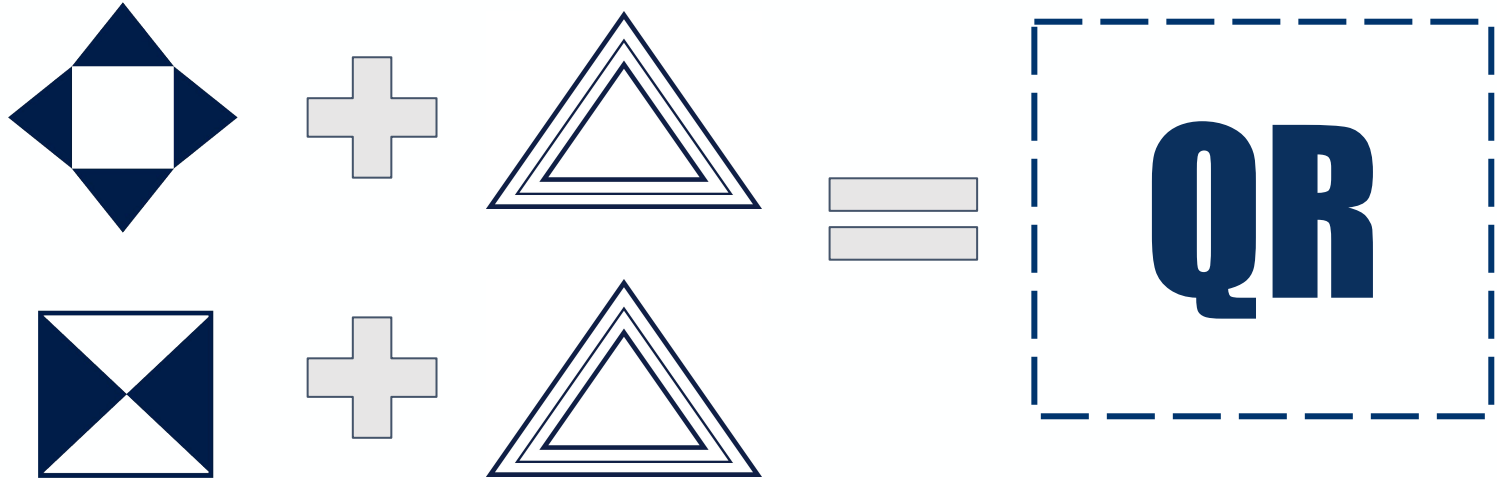
Building Connections





# QR Attribute means utilizing, evaluating, analyzing, and communicating varied quantitative information

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# What is the Quantitative Reasoning Attribute?

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**The QR Attribute is NOT:**

- ❖ **More math.**
- ❖ **A required amount of math.**
- ❖ **Restricted to math and/or science courses**

**The QR Attribute IS:**

- ❖ **An opportunity for student to use quantitative reasoning as a tool for creativity, exploration, and problem solving**



# Required Student Learning Outcome

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*Students will demonstrate competency in:*

Working with numerical information by critically analyzing quantitative information, generating ideas that are supported by quantitative evidence, assessing the relevance of data and its associated implications in a variety of contexts, and communicating those ideas and/or associated interpretations using various formats (graphs, data tables, equations, oral presentations, or written reflections).



# Breaking Down the SLO

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*Students will demonstrate competency in:*

- Working with numerical information by critically analyzing quantitative information
- Generating ideas that are supported by quantitative evidence,
- Assessing the relevance of data and its associated implications in a variety of contexts,
- Communicating those ideas and/or associated interpretations using various formats (graphs, data tables, equations, oral presentations, or written reflections).





# Quantitative Reasoning Across the Curriculum

*All learners can benefit from sustained engagement with quantitative reasoning.*

Some Exploring Perspectives (EP) and Building Connections (BC) courses will be taught as Quantitative Reasoning (QR) Attribute courses:

1. To help students apply quantitative thinking, knowledge, and skills to authentic contexts
2. To allow students to practice different types of field or discipline-specific quantitative reasoning
3. To facilitate students' effective and ethical use of quantitative information



# Signature Assignments

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- ❖ Signature Assignments should aim not only to take the form of calculations or other quantitative problems or projects, but instead to provide students with opportunities to showcase learning and progress with quantitative reasoning.
- ❖ This can be accomplished via multiple signature assignments (each hitting different aspects of QR) or as larger, project-type signature assignments that incorporate materials/ideas/concepts from throughout the course.
- ❖ Signature Assignments must highlight the QR learning outcome (or aspects of it), and should represent meaningful learning *experiences*.



# Takeaways for Course Transitioning

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- ❖ You don't have to start over! Consider extending from what you already have designed in your course and really emphasize the application and reasoning aspects.
- ❖ You have freedom with HOW to integrate the Quantitative Reasoning Attribute.
- ❖ Be creative! And allow space for your students to be creative and generative in their engagement with quantitative reasoning.

GENERAL EDUCATION CURRICULUM INFORMATION

# Quantitative Reasoning in GE

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