

## QUANTITATIVE REASONING (QR)

### (minimum of 6 credits)

Students must complete a minimum of two 3-credit QR courses, one of which must be a college-level mathematics course taught by the Mathematics Department, numbered "MA-XXX," and specifically approved for QR credit. Terms such as "math," "mathematics," "quantitative," or similar in a course title or description do not guarantee that a course meets the above criteria, and courses such as MA 098 and MA 099 do not qualify because they do not satisfy the QR requirement. The MA course must be completed within the first 60 credits of study, though exceptions may apply for transfer students. All students must pass the Math Placement Test at the stipulated level in order to register for a MA course above MA 105.

Courses in this area:

- Acquaint students with formal systems, procedures, and sequences of operations.
- Strengthen students' understanding of variables and functions.
- Apply mathematical techniques to the analysis and solution of real-life problems.
- Develop an understanding of and facility with statistical analysis, including an understanding of its applications and limitations. Courses meeting these criteria must emphasize why statistical inference works and not simply how to use statistical techniques.
- Strengthen understanding of the relationship between algebraic and graphical representations.
- Emphasize the importance of accuracy, including precise language and careful definitions of mathematical concepts.
- Understand both underlying principles and practical applications of one or more fields of mathematics.

Code	Title	Credits
CH-120	General Chemistry I	4
CS-101	Basics of Computer Science	3
CS-120	Microcomputer Applications	3
CS-124	Health Informatics	3
CS-131	Data Visualization and Statistical Analysis	3
CS-135	Programming for Non-CS Majors	3
CS-155	Computer Networking and Security	3
CS-265	Database Applications	3
EC-150	Statistics	3
ED-322	Contemporary Education Policy	3
EV-348	Fundamentals of Earth Data Analytics	4
GS-217	Spatial Data Methods	3
GS-348	Fundamentals of Earth Data Analytics	4
MA-105	Survey of Mathematics	3
MA-107	Mathematical Explorations-- Invitation To Effective Thinking	3
MA-130	Number and Operations for Teachers	3
MA-131	Patterns, Functions and Algebra for Teachers	3
MA-132	Geometry, Measurement, Probability and Statistics for Teachers	3
MA-150	Statistics I	3
MA-180	Introduction to Functions	3

MA-190	Pre-calculus	4
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-202	Business Calculus	4
NU-333	Nursing Informatics (track 2)	3
PH-115	Logic I	3
PH-215	Logic II	3
PS-275	Psychological Statistics	4
PS-340	Psychological Testing and Measurement	3
TH-175	Introduction to Stagecraft	3
UR-214	Urban Demography	3
UR-232	Quantitative Data Analysis of Urban Problems	3