

Course discipline/number/title: MATH 0911: Foundations of Quantitative Reasoning

- A. CATALOG DESCRIPTION
1. Credits: 3
 2. Hours/Week: 3
 3. Prerequisites (Course discipline/number): MATH 0093M READ 0900
 4. Other requirements: Must be taken concurrently with MATH 1111 and prerequisites may be satisfied by equivalent Math and/or Reading placement scores.
 5. MnTC Goals (if any): NA
- B. COURSE DESCRIPTION: This course is designed to be taken concurrently with Math 1111 Quantitative Reasoning. The course focuses on concepts, operations, and models involved with to prepare for Quantitative Reasoning topics. Must be taken concurrently with MATH 1111 and prerequisites may be satisfied by equivalent Math and/or Reading placement scores.
- C. DATE LAST REVISED (Month, year): December, 2022
- D. OUTLINE OF MAJOR CONTENT AREAS:
1. Modeling and Problem Solving
 2. Ratios and Proportions
 3. Finance Mathematics
 4. Probability
 5. Statistics
- E. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Convert between percents, decimals, fractions, proportions, and units.
 2. Use estimation to check reasonableness of solutions.
 3. Use scientific notation to represent large or small numbers.
 4. Apply problem solving techniques to contextual problems.
 - a) Read, interpret, and make conclusions about data that is summarized in a table or a graphical display.
 - b) Identify key graph features and interpret in context.
 5. Evaluate linear and non-linear expressions including exponentials.
 6. Perform operations with fractions, decimals and percents.
 7. Use interval notation to represent inequalities.
 8. Calculate and interpret a constant rate of change (slope) and intercepts of a linear equation.
- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
1. Exams
 2. Homework
 3. Quizzes
 4. Cooperative Group Assignments
 5. Projects
- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.
- I. SPECIAL INFORMATION (if any): None