MATH1101 - Mathematical Reasoning

Credits:	4 (4/0/0)
Description:	Meets MnTC Goal Areas 2 and 4. This course will introduce you to mathematical approaches to question asking, understanding, problem solving and presentation. Students will apply mathematical principles to varied disciplines including an exploration of a variety of social and global issues. Students will experience mathematics as a creative and evolving discipline. Practice in these areas may include problems involving sequences, methods of counting, probability, logic, statistics, finance, general problem solving and other topics. This course is not intended to prepare students for any subsequent course. It provides an alternative pathway to completing a college-level liberal arts mathematics course and is not intended for science, technology, engineering or math (STEM) students. Prerequisites: A grade of C or better in MATH 0095 or appropriate score on the math placement exam.
Prerequisites:	• Completion of MATH 0095 with a grade of C or higher OR placement into college-level Math.
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Read and interpret quantitative information from a variety of real-world sources. 2. Illustrate and express in writing the historical and contemporary applications of mathematical systems. 3. Interpret and state mathematical problems in a clear manner. 4. Apply mathematical reasoning to a broad range of problems. 5. Describe different mathematical situations using words, algebraic symbols, graphs and tables. 6. Calculate and interpret measures of center and measures of dispersion. 7. Solve and interpret situations using the principles of counting and probability models. 8. Solve real-world problems that can be modeled with permutations and combinations. 9. Demonstrate the use of Venn diagrams and set operations. 10. Create and use linear and nonlinear models in real-world situations. 11. Calculate and describe rate of change. 12. Determine a reasonable domain of a model based on given scenario.
MnTC goal areas:	2. Critical Thinking 4. Mathematics/Logical Reasoning

**Can be taking as a Prerequisite or Corequisite.*

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