

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. MATH

COURSE NUMBER: 0092

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT: 0

Course Title:

Essentials in Mathematics – Pre-Algebra

Catalog Description:

Essentials of Mathematics – Pre-Algebra assists students in developing a thorough understanding of basic mathematics. Intuition and sound mathematical techniques are used to analyze and solve problems in fractions, decimals, ratios, proportions and percentages. Metric geometry is also covered and an introduction to algebra. This is NOT considered a transfer course.

Prerequisites or Necessary Entry Skills/Knowledge:

Placement using multiple measures.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered

Whole Numbers

Fraction Notation: Multiplication and Division

Fraction Notation and Mixed Numbers

Decimal Notation

Ratio and Proportion

Percent Notation

Data, Graphs and Statistics

Measurement

Geometry
Real Numbers
Algebra: Solving Equations and Problems

Student Learning Outcomes
Use arithmetic skills on rational numbers effectively.
Use estimation skills for their computations.
Solve simple algebraic equations and use them to solve problems.
Use geometric measures and statistical calculations to describe real-world problem-solving situations.
Develop a mathematical problem-solving approach.
Explain verbally and in writing steps and solutions to mathematical situations.

Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> *If yes, please list the competencies below

Revised Date: 9/1/2021