

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number: MTE 2**

**Credits: 1**

**Course Title:** Operations with Positive Decimals and Percents

**Course Description (as it should appear in the catalog)**

Includes operations and problem solving with positive decimals and percents. Emphasizes applications and includes U.S. customary and metric units of measure. Credits not applicable toward graduation. Prerequisite: placement recommendation or MTE 1. Lecture 4 hours per week for  $\frac{1}{4}$  semester.

**General Course Purpose**

This course is designed to provide understanding and practice in decimals and operations on decimals, to provide understanding and practice using percents and units of measurement.

**Course Objectives** (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

1. Convert decimals between standard notation and word notation.
2. Identify place values in decimals.
3. Add and subtract decimals.
4. Multiply decimals.
5. Divide decimals.
6. Simplify expressions using order of operations.
7. Round decimals to a specific place value.
8. Estimate sums, differences, products, and quotients with decimals.
9. Write parts of a whole using percent notation.
10. Convert among fractions, decimals and percents.
11. Order a list of fractions and decimals from smallest to largest.
12. Calculate all values in the basic percent problem.
13. Calculate percent increase and percent decrease.
14. Calculate sales tax and commission.
15. Calculate simple interest.
16. Read and interpret information from a pie graph.
17. Calculate the percentage denoted by a pie graph.
18. Read and interpret information from a bar graph.
19. Read and interpret information from a line graph.
20. Convert within the U.S. system.
21. Convert within the metric system.
22. Convert between U.S. and metric units using conversion tables.
23. Convert units of time.
24. Convert between Fahrenheit and Celsius temperatures.
25. Solve application problems using U.S. and metric units of measurement.

**Major Topics to be Included**

1. The meaning of decimal numbers
2. Operations with decimals
3. Estimating decimals
4. Relationship among fractions, decimals, and percents
5. Basic Percent problems
6. Basic graphs
7. Units of measurement

**Effective Date of Course Content Summary (Month, Date Year):** January 2, 2012