

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

Course Prefix and Number: MTH 111 **Credits:** 3

Course Title: Basic Technical Mathematics

Course Description:

Provides a foundation in mathematics with emphasis in arithmetic, unit conversion, basic algebra, geometry and trigonometry. This course is intended for CTE programs. Prereqc1.04 -0hn2 (s)B0.002 T

General Course Purpose:

This course is intended for stu
requiring technical math comp

Course Prerequisites and Co

Prerequisites: Competency in
or by satisfactorily completing

Student Learning Outcomes

Upon completing the course, t

1. Demonstrate basic skill
 - Use a scientific calculator
 - Round off numbers
 - Identify significant figures
 - Use scientific notation
 - Convert between units
 - Perform operations
2. Demonstrate knowledge
 - Apply and interpret
 - Compute values in
 - Solve single variab
 - Locate and plot poi
 - Interpret the conce
 - horizontal lines);
 - Graph lines using a
 - Graph lines using the
 $Ax + By = C$ form;
 - Write the equation
 - when given the rate
 - Make predictions u
3. Demonstrate knowledge
 - Classify triangles b

- Calculate the perimeter and circumference;
- Calculate the area of a polygon and circle;

- Apply concepts of sector and arc length of a circle;
- Recognize various geometric solids such as cylinder, cone, pyramid, prism, and sphere;
- Calculate surface area and volume of various geometric solids;
- Use the properties of inscribed and circumscribed polygons and circles to find unknown amounts;
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