



North Polk Community Schools Pacing & Course Description Guide



Grade Level: 11th, 12th

Content: DMACC Applied Math

Year: 2022

Course Description/Rationale

A course in elementary mathematical skills for technicians. Topics covered include fundamental operations with whole numbers, fractions, decimals and signed numbers; percentages; geometry figures and basic constructions; area and volume formulas; English/Metric systems; measurements; and the interpretations of graphs and charts.

[Copy of DMACC Applied Math Competencies.pdf](#)

Name of Unit	Time Frame	Essential Learning Target	Standard(s)
Basic Operations	2 weeks	<ul style="list-style-type: none"> • Add, subtract, multiply, and divide rational numbers • Simplify and reduce fractions • Simplify expressions using Order of Operations 	Competency 1: Use Numbers in a variety of equivalent forms.
Signed Numbers	2 weeks	<ul style="list-style-type: none"> • Add, subtract, multiply, and divide signed numbers. • Perform mathematical operations with scientific notation. 	Competency 2: Compute with whole numbers, fractions, decimals, and integers in real world and mathematical solving. Competency 3: Use computational techniques appropriate to specific problems.
Metric System	2 weeks	<ul style="list-style-type: none"> • Convert between units in the metric system. 	Competency 8: Convert measurements within the metric and English systems and between systems.
Measurements	2 weeks	<ul style="list-style-type: none"> • Attend to accuracy and precision 	Competency 9:

		<ul style="list-style-type: none"> ● Read and interpret scales. 	<p>Use appropriate units and tools to measure to the degree of accuracy required in a particular situation.</p> <p>Competency 10: Interpret scales to the degree of accuracy required in a particular situation.</p> <p>Competency 11: Interpret graphs and charts.</p>
Geometry	3-4 weeks	<ul style="list-style-type: none"> ● Perform various geometric constructions. ● Calculate the area and perimeter of geometric shapes. ● Calculate in radian measure. ● Calculate the volume of geometric solids ● Use the Pythagorean Theorem ● Calculate trig ratios ● Solve right triangles. 	<p>Competency 4: Recognize whether or not an answer is reasonable.</p> <p>Competency 5: Identify basic geometric figures.</p> <p>Competency 6: Demonstrate basic geometric constructions.</p> <p>Competency 7: Apply geometric properties and relationships in real-world and mathematical problems solving.</p>

