C	NT1	
Course	Number:	

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## **OBJECTIVES/COMPETENCIES**

Course Objectives	Competencies
	Same as Algebra 2 and Technical Mathematics 1
Polynomials and Quadratic equations:	
Factor out common factors.	
Factor trinomials of the form $x^2$ + bx + c	
Factor trinomials of the form ax <sup>2</sup> + bx + c	
Factor perfect squares and difference of two squares.	
Solve quadratic equations by factoring and applications	
Solve quadratic equation using the quadratic formula	
The graph of the quadratic equation	
Functions	
Objectives:	
Identify a function, domain and range	
Function Notation and Evaluating a function from an equation.	
Radical Expressions and Equations	
Objectives:	
Simplify square roots.	
Add and subtract radical expressions.	
Multiply and divide radical expressions; rationalize denominators	
Solve radical equations.	
Rational Expressions and Equations	
Objectives:	
Simplify rational expressions.	
Multiply and simplify rational expressions.	

Course Objectives	Competencies
Divide and simplify rational expressions.	
Adding, subtracting.	
Solving rational equations.	
Applications	
Exponential and Logarithmic Functions	
Objectives:	
Graph exponential functions.	
Solve exponential equations.	
Convert expressions between exponential and logarithmic form	
Solve logarithmic equations	
Trigonometry – Right Triangle	
Objectives:	
Define the six trigonometric functions in terms of a right triangles	
Evaluating trig functions – solving right triangles	
Solve applied right triangle problems.	