MATH1118 - Precalculus

Credits:	5 (5/0/0)
Description:	Meets MnTC goal areas 2 and 4. This course includes trigonometric identities and polynomial, exponential, logarithmic, rational and trigonometric functions, their inverses and their graphs. Optional topics may include matrices and determinants, conic sections, vector concepts and polar coordinates.
Prerequisites:	• Math 1020 with a C or better or by placement score • MATH1020
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Analyze characteristics of polynomial functions and their graphs. 2. Analyze characteristics of rational functions and their graphs. 3. Analyze characteristics of exponential functions and their graphs. 4. Analyze characteristics of logarithmic functions and their graphs. 5. Determine real and complex zeros of polynomials. 6. Perform function operations including composition. 7. Use mathematical modeling to solve application problems. 8. Analyze the characteristics of trigonometric functions, their inverses and graphs. 9. Solve trigonometric equations. 10. Identify and prove trigonometric identities. 11. Use trigonometric identities to evaluate functions and simplify expressions. 12. Explore the Law of Cosines. 13. Explore the Law of Sines. 14. Use Circular methods to define trigonometric functions. 15. Use right triangular methods to define trigonometric functions.
MnTC goal areas:	2. Critical Thinking 4. Mathematics/Logical Reasoning

**Can be taking as a Prerequisite or Corequisite.*