## MATH1116 - College Trigonometry

| Credits: | $3(3 / 0 / 0)$ |
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| Description: | Meets MnTC Goal Areas 2 and 4. Topics include trigonometric functions, right triangle <br> trigonometry, radian measure and circular functions, identities, equations, inverse functions, <br> laws of cosines and sines. Optional topics may include complex numbers, vectors and polar <br> coordinates. |
| Prerequisites: | - MATH1114 |
| Corequisites: | Pre/Corequisites*: |
| Competencies: | 1. Use circular methods to define trigonometric functions. <br> 2. Use right triangle methods to define trigonometric functions. <br> 3. Analyze the characteristics of trigonometric functions, their inverses and graphs. <br> 4. Solve trigonometric equations. <br> 5. Identify and prove trigonometric identities. <br> 6. Use trigonometric identities to evaluate functions and simplify expressions. <br> 7. Solve applications involving trigonometric concepts. <br> 8. Explore the Law of Cosines. <br> 9. Explore the Law of Sines. |
| MnTC goal areas: | 2. Critical Thinking <br> 4. Mathematics/Logical Reasoning |

*Can be taking as a Prerequisite or Corequisite.

