

MTH 112 : TRIGONOMETRY

Transcript title

Trigonometry

Credits

4

Grading mode

Standard letter grades

Total contact hours

40

Lecture hours

40

Recommended preparation

MTH 111 or minimum placement Math Level 20.

Course Description

Examines the applied, real-world and theoretical mathematical implications of the trigonometric functions. The symbolic, numerical, and graphical representations of these functions and their applications form the core of the course. Emphasizes solving problems symbolically, numerically and graphically and understanding the connections among these methods in interpreting and analyzing results. Graphing calculator required. TI-83 or TI-84 recommended.

Course learning outcomes

1. Model and solve applied, real world, and theoretical mathematical problems involving right triangle and oblique-triangle trigonometry.
2. Model and solve problems using symbolic, graphic, and numeric strategies and translate among written descriptions, symbolic, graphic, and numeric representations of trigonometric functions.
3. Use a graphing calculator to create trigonometric graphs that represent mathematical models, determine appropriate viewing windows, and accurately interpret and draw inferences regarding the meaning and limitations of the graphs.
4. Apply and interpret the meaning of trigonometric identities to solve trigonometric equations.

General education/Related instruction lists

- Science not Lab
- Mathematics