

# math110 Syllabus

## Math 110: Pre-Calculus, Trigonometry and Function Theory

**Text:** *Precalculus, 3rd Edition*, Cynthia Young, Wiley, 2018.

**Prerequisite:** Minimum ACT math score of 24, Math 109 with a minimum grade of C, or placement by the Advance Credit Exam.

**WileyPLUS is required. A TI-83 or TI-84 graphing calculator is required.**

### Sections and Topics

- 4.1 Angle Measure
- 4.2 Right Triangle Trigonometry
- 4.3 Trigonometric Functions of Angles
- 4.4 The Law of Sines
- 4.5 The Law of Cosines
- (Optional: Heron's Formula)
- 5.1 Trigonometric Functions: The Unit Circle Approach
- 5.2 Graphs of Sine and Cosine Functions
- 5.3 Graphs of Other Trigonometric Functions
- 6.1 Verifying Trigonometric Identities
- 6.2 Sum and Difference Identities
- 6.3 Double-Angle and Half-Angle Identities
- 6.5 Inverse Trigonometric Functions
- 6.6 Trigonometric Equations
- 7.1 Vectors
- 7.2 The Dot Product
- 7.3 Polar Form of Complex Numbers
- 7.4 Operations of Complex Numbers
- 7.5 Polar Coordinates and Graphs of Polar Equations
- 9.9 Parametric Equations and Graphs

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