

math110 Syllabus

Math 110: Pre-Calculus, Trigonometry and Function Theory

Text: *College Algebra & Trigonometry*, Julie Miller and Donna Gerken, McGraw Hill, 2017.

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

ALEKS is required. A TI-83, TI-84, or TI-Nspire (not CAS version) graphing calculator is required.

Sections and Topics

- Sec 5.1: Angles and Their Measure
- Sec 5.2: Right Triangle Trigonometry
- Sec 5.3: Trigonometric Functions of Any Angle
- Sec 5.4: Trigonometric Functions Defined on the Unit Circle
- Sec 5.5: Graphs of the Sine and Cosine Functions
- Sec 5.6: Graph of Other Trigonometric Functions
- Sec 5.7: Inverse Trigonometric Functions
- Sec 6.1: Fundamental Trigonometric Identities
- Sec 6.2: Sum and Difference Formulas
- Sec 6.3: Double-Angle, Power-Reducing, and Half-Angle Formulas
- Sec 6.5: Trigonometric Equations
- Sec 7.1: Applications of Right Triangles
- Sec 7.2: The Law of Sines
- Sec 7.3: The Law of Cosines
- Sec 7.4: Harmonic Motion
- Sec 8.1: Polar Coordinates
- Sec 8.2: Graphs of Polar Equations
- Sec 8.3: Complex Numbers in Polar Form
- Sec 8.4: Vectors
- Sec 8.5: Dot Product
- Sec 11.6: Plane Curves and Parametric Equations

Last updated 10 August 2020