

# math210 Syllabus

## Math 210: Practical Mathematics

**Text:** *Technical Mathematics, 6th edition*, Paul Calter and Michael Calter, Wiley, 2011.

**Prerequisites:** Credit for math 102, math 103/104, or math 105. **A TI83, TI83+, or TI84 graphing calculator is required.**

### Sections and Topics

- 1.1 Real Numbers
- 1.2 Addition and Subtraction
- 1.3 Multiplication
- 1.4 Division
- 1.5 Powers and Roots
- 1.6 Combined Operations
- 1.8 Units of Measurement
- 1.9 Percentage
- 6.1 Straight Lines and Angles
- 6.2 Triangles
- 6.3 Quadrilaterals
- 6.4 The Circle
- 6.5 Polyhedra
- 6.6 Cylinder, Cone and Sphere
- 7.1 The Trig Functions
- 7.2 Solving a Right Triangle
- 7.3 Applications of Right Triangles
- 7.4 Angles in Standard Position
- 8.1 Trig Functions of Any Angle
- 8.2 Finding the Angle
- 8.3 Law of Sines
- 8.4 Law of Cosines
- 8.5 Applications
- 7.5 Introduction to Vectors
- 7.6 Applications of Vectors
- 8.6 Nonperpendicular Vectors
- 14.1 Radian Measure
- 14.2 Arc Length
- 14.3 Uniform Circular Motion
- 15.1 The Sine Curve

- 15.2 Graphing the Sine Curve
- 15.4 The Cosine Curve
- 17.1 Ratio and Proportion
- 17.2 Similar Figures
- 17.3 Direct Variation
- 17.4 The Power Function
- 17.5 Inverse Variation
- 17.6 Joint and Combination Variation
- 18.2 Logarithms
- 18.3 Properties of Logarithms
- 18.4 Exponential Equations
- 18.5 Logarithmic Equations

Last updated 19 August 2011