



## Mth C407-50 Thinking Geometrically

Center for Teaching Excellence  
University of Virginia's College at Wise

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Grading: 3 hour undergraduate college credit

### I. Course Description:

Math C407 is designed to refresh your conceptual knowledge of geometry while gaining technology tools to enhance your geometry classroom. Explore geometry concepts through real world applications that combine technology and problem-solving skills to make math exciting and challenging for today's learner. Throughout the course, we will also discuss various methods of teaching these geometric topics.

This class is designed to be a truly supportive learning community where students can learn and work together in an online format. Since there is no face-to-face meetings, students are required to post on a teaching tip forum each week to share activities and ideas. Students are also required to submit homework weekly or biweekly.

### Course Goal

This course will reinforce the content and teaching methods of the Geometry Virginia Standards of Learning.

### Course Objectives

- Students in this course should be able to:
- Integrate technology in the geometry classroom
- Determine whether two lines are parallel using the properties of two lines cut by a transversal
- Determine if a figure is symmetric
- Determine if a figure has been translated, reflected, rotated, or dilated
- Use the formula for the slope of a line to solve real-world problems
- Solve real-world problems using properties of right triangles
- Use the properties of triangles to determine interior and exterior angles
- Solve real-world problems using the properties of polygons
- Solve real-world problems using the properties of circles
- Use formulas for surface area and volume of three-dimensional objects to solve real-world problems

