

**WEBSTER UNIVERSITY**

**COURSE SYLLABUS**

**MTHC 5080.01**  
**COURSE NUMBER and SECTION**

**Andrea Rothbart**  
**INSTRUCTOR**

**Puzzles and Proofs**

**Summer, 2006**

**Course Description**

This course, designed for middle school math teachers, examines a variety of materials useful in developing reasoning skills. Included are attribute block puzzles, Lewis Carroll puzzles, logic puzzles, paradoxes, and a variety of other puzzles and games that require deductive reasoning.

**Learning Outcomes**

Middle School Teachers will increase their skill in reasoning and in expressing mathematical ideas clearly. They will be able to distinguish valid arguments from invalid arguments and become adept at applying rules of inference. They will also have a body of curricular materials that can be used in their own classroom to help their students become more logical thinkers.

**Resources:** All materials will be distributed by the instructor. There is no textbook.

**Course Evaluation:** Based upon class participation, homework assignments and quizzes.

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