

**WILMINGTON UNIVERSITY  
COLLEGE OF EDUCATION AND LIBERAL ARTS  
BASIC COURSE INFORMATION**

**COURSE NUMBER:** MAT202

**TERM:**

**COURSE TITLE:** Math for Teachers 2

**Faculty Name:**

**Contact Information:**

**Pre-Requisite:** Pass MAT201 with a C or better.

**Text/Software:**

**Credits:** 3

**40 Hours of Structured Learning Activities**

**COURSE DESCRIPTION:** This class will prepare teacher candidates to become effective mathematics teachers in their own classrooms. Through mathematical investigations, candidates will learn the underlying concepts, structures, functions and patterns that promote mathematical reasoning and understanding. Candidates will investigate how moving progressively through essential topics deepens their understanding of mathematics. Students will use the National Council of Teachers of Mathematics Standards and STEM strategies. Various methods such as modeling, collaboration, manipulatives, thinking made visible, and writing across the curriculum will be presented for bridging classroom activities and real-world problem solving. Teacher candidates will learn how to analyze their students' math-solving processes by developing thorough explanations of their own mathematical understanding and analyzing the explanation of others' mathematical understandings. Candidates will communicate their mathematical ideas, processes, analyses and understandings through both writing and speaking. This course concentrates on concepts pertaining to *rational numbers and geometry*.

**COURSE OBJECTIVES**

1. Construct geometrical objects, such as, but not limited to, lines, angles, polygons, and solids.
2. Classify geometrical objects, such as, but not limited to, lines, angles, polygons, and solids.
3. Apply transformations to geometrical objects, such as, but not limited to lines, angles, polygons, and solids.
4. Apply theorems about circles, radii and diameters.
5. Solve contextual problems involving perimeter, area, and volume.
6. Solve contextual problems involving measurement.

7. Use operations and properties of rational (decimals) and irrational numbers.
8. Apply problem-solving techniques to a variety of context that involve rational and irrational numbers.

### **EVALUATION PROCEDURE AND GRADING POLICY:**

Grades will be determined using the following weights:

Homework (Addresses objectives 1 through 8)	10%
Participation/Labs (Addresses objectives 1 through 8)	10%
Final Exam (Addresses objectives 1 through 8)	40%
Projects (Addresses objectives 1 through 8)	40%

### **LATE ASSIGNMENT POLICY:**

Mathematical objectives build on one another. For that reason, due dates are established to ensure that students are able to participate in the next lesson and that instructors can address students' misconceptions. If a student cannot meet a deadline, it is the student's responsibility to contact the instructor ahead of time, requesting an extension. When requesting an extension, the student must provide credible information and/or documentation to the instructor for review. The instructor will review requests and grant extensions on a case-by-case basis.

Possible reasons to request extensions: military deployment, severe health issues, natural disasters.

Unacceptable reasons to request extensions: busy schedule, forgetfulness, last minute issues.

Online discussion boards: As it is not fair to other students in the course who are expected to respond to discussion board posts in a timely manner, late discussion board posts after the initial posting deadline do not receive credit.