# Mathematics for Elementary Teachers I
## MAT 201

## Course Information

## Textbook Information

**Title:** Mathematical Reasoning for Elementary Teachers: A Contemporary Approach 7e with Media Update  
**Author:** Long, DeTemple, Millman  
**Publisher:** Pearson  
**ISBN-13:** 9780134766751

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MAT 201
Learning Outcomes

MAT 201 Math for Elementary Teachers I - Number, Operations and Numerical Systems

Credit Hours: 3  
Effective Term: Fall 2015  
SUN#: NA  
AGEC: Mathematics

Credit Breakdown: 3 Lectures  
Times for Credit: 1  
Grading Option: A/F Only  
Cross-Listed: None

Description: An explanation of numbers, number systems, operations on numbers, and problem solving. The course is designed to meet the requirements for prospective elementary education teachers.

Prerequisites: MAT141 or MAT151

Corequisites: None

Recommendations: NA

### Measurable Student Learning Outcomes

1. (Application Level) Apply basic set theory, patterns and inductive/deductive reasoning to solve problems.
2. (Application Level) Solve problems from a variety of contexts using a variety of strategies including technology.
3. (Application Level) Perform operations in non-base ten systems.
4. (Application Level) Solve problems of area, perimeter, volume, ratios and percent.
5. (Application Level) State, illustrate and apply number properties.
6. (Analysis Level) Analyze number patterns to solve problems and extend number patterns to algebraic reasoning.
7. (Application Level) Apply number systems to solve problems.
8. (Application Level) Apply various mental and concrete models for addition, subtraction, multiplication and division operations.
9. (Analysis Level) Analyze interconnections among mathematical operations.
10. (Application Level) Apply algebra concepts and processes including the real number system and proportional reasoning.

### Internal/External Standards Accreditation

5/15/19