

MTH 211 : Foundations of Elementary Math I

Examines the conceptual basis of K-8 mathematics using collaborative learning through in-class group interaction. Provides opportunities to experience using manipulatives to model problem solving, numeration systems, operations, patterns and change, and number theory. Emphasizes quantitative and algebraic reasoning. Includes content and mathematical practices based on the Common Core State Standards.

Credits 4

Prerequisites

Equivalent placement test scores also accepted.

Subject

[Mathematics](#)

Course Outcomes

Upon successful completion students should be able to:

- Apply an understanding of the theoretical foundations of mathematics focusing on numeration systems and operations as taught at the K-8 level in order to develop mathematical knowledge and communication skills necessary for teaching.
- Use various problem solving strategies and algebraic reasoning to create mathematical models, analyze real world scenarios, judge if the results are reasonable, and then interpret and clearly communicate the results.
- Use appropriate mathematics, including correct mathematical terminology, notation, and symbolic processes, and use technology to explore the foundations of elementary mathematics.
- Foster the mathematical practices in the Common Core State Standards.

Prerequisite Courses

[WR 115](#)

[RD 115](#)

[MTH 95](#)