Online Interactive Learning Format

EDUX 6495 (F, G, H) COMMON CORE MATHEMATICS: GRADES K - 5

Course Description

In this course, participants will not only learn what the Common Core Standards for Mathematics (CCSSM) are; they will also go beyond these basics to take a detailed look at the standards for content and practice. Participants will investigate each of the grade level categories and review relevant strategies, tools, and resources.

Course Objectives

- Recognize the rationale and the advantages of having a common set of standards across the states.
- Examine the state standards to understand how and why they are sequenced as they are.
- Understand the structure and organization of the Common Core State Standards for Mathematics, including the domains, clusters, and standards
- Connect the five building blocks of mathematics with the grade level standards.
- Recognize the appropriate usage of the various types of representation.
- Recognize the eight standards of mathematical practice and how including all standards in the curriculum increases the chance that students will be successful in math.
- Adapt strategies to develop the eight standards for mathematical practice in your classroom.
- Interpret the intended outcomes for the topics of counting and cardinality and operations and algebraic thinking (based on the Common Core).
- Develop instructional strategies using manipulatives (objects or virtual) to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of counting and cardinality and operations and algebraic thinking.
- Interpret the intended outcomes for the domains of numbers and operations in base ten and numbers and operations-fractions (based on the Common Core).
- Develop instructional strategies using manipulatives (objects or virtual) to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of numbers and operations in base ten and fractions.
- Interpret the intended outcomes for the domains of geometry and measurement and data (based on the Common Core).
- Develop instructional strategies using manipulatives (objects or virtual) to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of geometry and measurement and data.