Online Interactive Learning Format

EDUX 6505 (F, G, H) COMMON CORE MATHEMATICS: GRADES 9 - 12

Course Description

In this course, participants not only learn what the Common Core Standards for Mathematics (CCSSM) are; they will also go beyond these basics to take a detailed looked look at the standards for content and practice. Participants will investigate each of the six conceptual 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 conceptual categories, domains, clusters, and standards
- Connect the five building blocks of mathematics with the conceptual categories.
- 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 conceptual category: number and quantity (based on the Common Core).
- Develop instructional strategies using manipulatives and technology to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of number and quantity.
- Interpret the intended outcomes for the conceptual categories: algebra and functions (based on the Common Core).
- Develop instructional strategies using manipulatives and technology to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of algebra and functions.
- Interpret the intended outcomes for the topics of geometry and statistics & probability (based on the Common Core).
- Develop instructional strategies using manipulatives and technology to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of geometry and statistics & probability.