

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 three 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 ratios and proportional relationships and the number system (based on the Common Core).
- Develop instructional strategies using manipulatives (objects or virtual) or technology to encourage mathematical reasoning, to make math more meaningful to students, and to encourage deeper understanding of ratios, proportional relationships and the number system.
- Interpret the intended outcomes for the topics of expressions & equations 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 expressions, equations, 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.