

MATHEMATICAL CONTENT KNOWLEDGE FOR TEACHING, GRADUATE CERTIFICATE

Introduction

This certificate program is focused, first and foremost, on augmenting practicing teachers' mathematical content knowledge for teaching. Each course is organized to fit teachers at all K-12 school grade levels, including mathematics and special education teachers. Major themes for each course are informed by national and state standards, particularly the new Colorado Common Core Standards. Each course will engage the participating teachers in exploring and expanding their own comprehension of the topics while examining and increasing their understanding of how students develop such knowledge.

Certificate Requirements

Required Courses

Each course stands alone; you may want to take one class or all three. All courses are three graduate credit hours and may be applied directly toward a full master's degree in STEM Education-Mathematics Education. Additional courses and applications are required for the master's degree. Courses may be taken in any order.

| Code | Title | Hours |
|-----------|--|-------|
| MTED 5621 | A World of (Different) Numbers: Quantity and Operation | 3 |
| MTED 5622 | Expanding Conceptions of Algebra | 3 |
| MTED 5623 | Geometrical Ways Of Reasoning | 3 |

Certificate format is online.