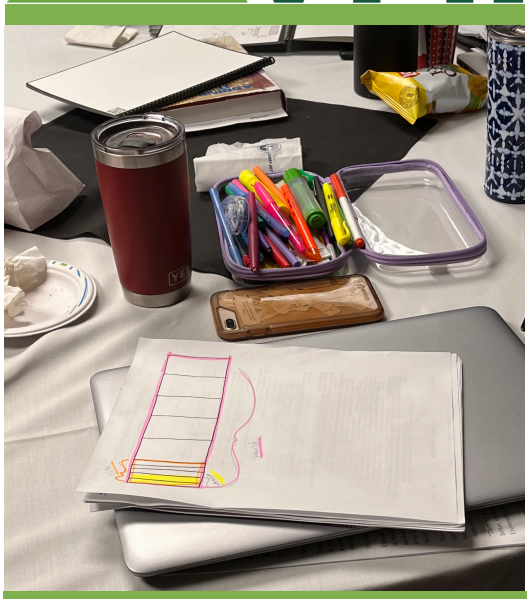

For questions, please contact
VMI Director, Kathryn Delay
(kathryn@vmimathematics.com)

Vermont Mathematics Initiative

Courses Starting January 9, 2026!

Where: VTSU Williston Campus
Hotel accommodations are provided at no additional cost for those commuting more than 45 minutes.

Tuition: $679 **per credit** - 2 credit courses may be taken for 3 credits with an additional 1 credit classroom Lab add-on

Instructors:

Number Theory - Susan Ojala, VMI

Essential Mathematics of the Elementary Grades - Lilly DePino, Kristen Kavanagh, & Josh Bunker

Dates:

Jan 9-10, Mar 6-7, and Apr 10-11

NUMBER THEORY
AND
ESSENTIAL MATHEMATICS OF THE ELEMENTARY GRADES

Spring Semester 2026

Number Theory (2 or 3 credits): This course introduces teachers to the branch of mathematics known as number theory, in which one studies properties of positive integers with respect to the operations of multiplication and division. Topics include properties of prime and composite numbers, the sieve of Eratosthenes and distributions of primes and composites, the fundamental theorem of arithmetic, properties of greatest common factors and methods of computing greatest common factors, properties of least common multiples, use of base ten and expanded notation, writing numbers and computing in different bases, basic ideas of modular arithmetic, the Division Algorithm, the Euclidean Algorithm, letter arrangements and lottery problems, counting problems, and problem solving in various contexts.

Essential Mathematics of the Elementary Grades (3 credits): This course builds teacher knowledge about the ways students construct essential mathematical understanding of multiplicative and fractional reasoning. Participants explore learning progressions associated with these critical ideas and understand the models and strategies students use to build a deep understanding of the concepts. Participants will also examine the mathematical concepts that precede the multiplication and fraction topics as well as the concepts that build from these critical understandings, and review research based practices for high quality mathematics instruction and assessment to address the Common Core State Standards for Mathematics for students in grades 3 – 5.

While a deep understanding of multiplicative and fractional reasoning is critically important for grades 3 – 5 teachers, the material in this course is essential content knowledge for all PreK-8 teachers, interventionists, special educators, and administrators.

To register use the QR code or go to surveymonkey.com/r/KQ7V29T