

FUNCTIONS AND ALGEBRA I

Summer 2026 Professional Development opportunity offered by
Vermont Mathematics Initiative



Location:

VTSU Campus, Williston, VT



Course information

Dates/Times: July 13-17, 2026

8:30-4:30 Monday, 8:00-4:00 Tuesday-Friday

Tuition: \$2037 (with 3 VTSU Graduate Credits);

Includes a catered lunch each day and hotel accommodations for those who live more than an hour from Williston. Hotel is available Monday-Thursday nights.

You will also need to purchase one book (\$40), which will be available on the first day of class.

To register: Use the QR code,
visit tinyurl.com/vmisummer
or contact Kathryn Delay
(kathryn@vmimathematics.com)



“Teachers need to understand the fundamental principles that underlie school mathematics, so that they can teach it to diverse groups of students as a coherent, reasoned activity and communicate and appreciate the elegance and power of the subject.”

(Mathematical Education for Teachers II, 2012)

This course builds upon the prior course *Mathematics as a Second Language* and extends and reinforces the learning from that course. Participants will obtain a deep understanding of the concept of a function, appreciate the pervasiveness of the function idea in everyday life, and engage in a variety of problem solving activities that hone arithmetic and algebra skills. Topics include functions, graphs, inverse functions, linear functions, the algebra and geometry of straight lines, linear inequalities, solving linear equations, and an introduction to nonlinear functions.

The *Mathematics as a Second Language* and the *Functions and Algebra I* courses are seamlessly related, with the latter course starting from where the former left off, building from the ideas of constant rate, ratio, proportion, and graph of the proportion. The central idea in this course is the notion of a function, which is an extremely powerful concept that provides an overarching umbrella for the study of patterns, tables, formulas, and graphs.

Prerequisite: *Mathematics as a Second Language* or by permission (contact Kathryn Delay, VMI Director)