StFX Master of Education in Mathematics Teaching and Learning Summer 2026-Spring 2028

The StFX Faculty of Education is proposing to offer an MEd (Curriculum and Instruction) in Mathematics for qualified in-service educators, coaches, mentors, and administrators beginning in Summer 2026. This cohort is designed to enhance mathematics knowledge for teaching and allow participants to examine current research in mathematics teaching and learning.

Graduate students will be required to participate in one in-person face-to-face (F2F) course as part of the two-week residency period at the initial Summer Institute. Campus accommodations information can be viewed here: Master of Education Accommodations July 5-17, 2026. All other courses will be taught online (OL), primarily via a synchronous online format. The first summer courses are condensed over two-week blocks (July 6, 8, 10, 13, 14, 16 and July 20, 22, 24, 27, 28, 30) with a start time of 8:30 am and end time of 3:30 pm, Atlantic Time. Most often, weekday synchronous online courses will be offered from 6:00 pm – 9:00 pm, Atlantic time (Teams, Collaborate, and/or Zoom). Graduate students should ensure that they have adequate personal resources (computer and internet connections) to support distance learning. Laptops/desktop computers are preferred as it is not possible to access all the features of the online platform if tablets and notebooks are used.

The **tentative** schedule of courses is included below:

| SUMMER | FALL | WINTER | SPRING | SUMMER | FALL | WINTER | SPRING |
|------------|------|--------|--------|-------------|------|--------|--------|
| 2026 | 2026 | 2027 | 2027 | 2027 | 2027 | 2028 | 2028 |
| 534 505 | 532 | 527 | 536 | 513 520C | 518 | 521C | 576 |

EDUC 534

Foundations of Education

Students are asked to critically examine their own practice and its context. Issues of power and privilege as they operate in the field of education are central unifying themes of the course. There is an emphasis on examining the historical and contemporary effects of colonization on education. The investigative approach includes ethical reasoning, autobiographical reflection, arts and aesthetics, deconstruction and sociological analysis. Three credits.

EDUC 505

Introduction to Education Research

This introductory course focuses on educators as researchers and creates opportunities for them to inquire into their practice to improve learning for students. Strategies and tools relevant to schools/classrooms and teacher research are explored. The goal of this course is to enable educators to develop an inquiry stance and to see how research can occur as they inquire into their own practice by intentionally using appropriate research methods and data to inform decision making. Three credits.

EDUC 532

Curriculum Theory

This course examines key issues in historical and contemporary approaches to curriculum theory. Several perspectives—including historical, philosophical, Indigenous, political, aesthetic, and ethical—will enable students to explore the vast, dynamic, changing, contradictory, and diverging issues in the field of curriculum studies. Three credits.

EDUC 527

Principles of Learning

This course examines theories of learning and development and their implications for instruction. In addition to the general cognitive and behaviourist theories, the course will focus on the aspects of cognitive learning that are relevant to understanding the diversity of learners. Teachers will explore current theories and their implications for practice.

EDUC 536

Program Development

In this course program development is explored from the practitioner's perspective with the intent of examining and revising existing programs along a continuum from teacher directed to student driven. Three credits.

EDUC 513

Contemporary Theories and Trends in Inclusive Education: Mathematics Education

This course examines emerging theories, practices and trends in inclusive education, including changing student needs and student-centred strategies for addressing them. Participants will learn about evidence-based approaches to implementing inclusive education in diverse contexts, including differentiation, Universal Design for Learning, Multi-Tiered Systems of Support, and culturally responsive practices. Three credits.

EDUC 520C

Current Research in Curriculum: Mathematics

A critical exploration of recent theories and research related to current issues in curriculum with a concentration in mathematics. In this course, students will explore how mathematical ideas develop throughout the grades. Topics covered will include an overview of quantitative reasoning including number systems and operations, algebraic reasoning, statistical and probabilistic reasoning exploring the ways in which we gather, organize and explain data, and spatial reasoning including the implications of this across content strands.

EDUC 518

Assessment for/as/of learning

The course explores research that informs how appropriate assessment impacts student motivation, engagement and achievement. Formative assessment will be presented as a process that directly involves both students and teacher in generating quality information that informs the decisions teachers and students make before, during, and after instruction. Practical classroom examples and/or case studies will be explored. The course will also explore summative assessment and critically analyze a variety of tools used to evaluate learning with the aim of finding those that align with current research in assessment. Credit will be granted for only one of EDUC 518 or EDUC 569 offered with a similar focus. Three credits.

EDUC 521C

Current Research in Instruction: Mathematics

A critical exploration of recent theories and research related to current issues in instruction with a concentration in mathematics. In this course, students will examine current approaches to engaging students in meaningful mathematics learning and explore how these instructional strategies are manifested at different grade levels. Explorations of concrete materials, mathematical modelling, problem solving, discourse, and engagement will form the foundation of the course.

EDUC 576

Specific Issues in Curriculum Development

This course will examine selected contemporary educational controversies and explore their implications for curriculum decision-making. Students will examine current issues and problems. In this course students will have an opportunity to dig deeply into a concept that is of interest to them and develop materials to implement in their own classroom or place of work.

Information and Admission Procedures

Applications for this program will be accepted until March 15, 2025.

The application information can be found at <u>How to Apply</u> For additional StFX admission inquiries please contact <u>med@stfx.ca</u>.

For additional inquiries specific to this concentration, please contact Lisa Lunney Borden at <u>lborden@stfx.ca</u>.

*Please note on the application that you are applying to the Master of Education in Curriculum and Instruction – Mathematics Education