

Education 475-4 Designs for Learning: Mathematics (Elementary)

Regular Summer Semester, 1984

Instructor: Jane Srivastava

Fridays, 8:30-12:20

Telephone: 926-0798

May 7 - August 3

Objectives

To investigate the fundamental concepts of the elementary school mathematics curriculum with emphasis on teaching and learning strategies as well as content.

To prepare prospective elementary school teachers to confidently plan, implement, and evaluate mathematics learning in an elementary school classroom.

To share the joys and challenges of learning and teaching mathematics.

Outline of Topics

Mathematics topics covered in the elementary school curriculum (numeration, place value, algorithms, ratio, geometry, measurement, problem solving, ...).

Strategies for developing concepts, learning facts, noting patterns, mastering skills, and solving problems.

Learning aids (manipulative materials, calculators, computers, textbooks...).

Typical Requirements

Reading and written assignments from texts and journals.

Classroom investigation and discussion.

Projects

Pre-requisite: Education 401/402 or equivalent.

Textbooks

Heddens, James W. Today's Mathematics (4th ed.), Science Research Associates, Toronto, 1979

Mathematics Resource Project, University of Oregon, Didactics and Mathematics, Creative Publications, Inc., Palo Alto, CA, 1978

Province of B.C. Ministry of Education, Mathematics Curriculum Guide Years One to Twelve, 1978