

SIMON FRASER UNIVERSITY
Education 378-3
SPECIAL TOPICS: MATHEMATICS FOR PRIMARY LEARNERS
(E1.00)

Spring Semester, 1994
(January 4 - March 31)
Fridays 5:00 - 9:00
Saturdays 9:00 - 3:00
January 14-15, February 11-12,
March 11-12 & April 1-2

Instructor: Ken Harper
Office: TBA
Phone: TBA
Location: Kelowna Telelearning Centre
1000 KLO Road, Kelowna

PREQUISITE: 401/402 or Teaching Certificate

COURSE DESCRIPTION:

Primary mathematics can be stimulating for both teachers and students. Throughout this course participants will be exposed to practical teaching ideas and strategies that use hands-on materials as the stimulus for developing mathematical understanding. They will work with manipulative materials, explore relationships, make observations, search for patterns and draw tentative conclusions, and will learn how to develop and incorporate similar well-focused activities into their own teaching. At various times they will be required to work individually, in small groups, or as a class to solve a variety of problems and to develop teaching-learning strategies appropriate for students in primary classrooms.

COURSE REQUIREMENTS:

Students will complete three projects:

- a. *Documentation of learning from hands-on experiences.* Students will present evidence of continuous work on the topics raised throughout the course. This includes care and attention to detail, references to other materials, further exploration of the topics, and adaptations that make them useful in the classroom. This is an opportunity for critical reflection and individual professional development.
- b. *A plan of action for teaching.* Students will develop a plan for one area of elementary mathematics based on what they have learned from course sessions, readings, the Curriculum Guide and other resources.
- c. *A demonstration lesson.* Students will involve others in a short lesson that incorporates appropriate strategies and materials for hands-on learning in mathematics.

REQUIRED TEXTS:

Bloomer, A., & Carlson, P. (1993). *Activity Math: Using Manipulatives in the Classroom*. Boston: Addison-Wesley.

British Columbia Ministry of Education. *Mathematics Curriculum Guide*. Victoria, B.C.: Queen's Printer.

RECOMMENDED TEXTS:

Baker, A., & Baker, J. (1990). *Mathematics in Process*. Portsmouth, NH: Heinemann.