

SIMON FRASER UNIVERSITY



EDUCATION 475-4

DESIGNS FOR LEARNING: MATHEMATICS (Elementary)

Spring Semester, 1991 (Jan. 7 - April 5) Tuesday, 4:30 - 8:20

Location: MPX 7500

Instructor: Ken Harper

PREREQUISITE: Educ 401/402 or equivalent.

COURSE DESCRIPTION

Elementary mathematics can be a stimulating subject for both teacher and student. The instructor has taught for fifteen years in Primary, Intermediate, and Secondary classrooms and attempts to foster enjoyment of Mathematics through a variety of activities and games selected to promote interest and growth in the subject and to reduce anxiety about ability. Throughout the course the student will be exposed to many techniques that have been successful in the classroom.

The focus for Education 475-4 will be on mastering the topics in the Elementary Curriculum for Mathematics. A strong emphasis will be placed upon the search for and study of patterns that are found in Mathematics.

Topics that will be addressed are:

- naming and counting
- operations on whole numbers
- fractions
- decimals
- percent
- the metric system
- bases
- problem solving
- geometry
- historical topics
- developing a math program

Grades will be based upon:

- attendance and participation
- completion of one major term project
- one short (10 minute maximum) class presentation
- one review of a text or math related book

Due dates and general guidelines will be discussed during the first sessions.

TEXTBOOKS

Mathematics Grades 1-8 Curriculum Guide, 1987.

<u>Teaching Mathematics in Grades K-8</u>, by Thomas R. Post.