SIMON FRASER UNIVERSITY

EDUCATION 475-4

DESIGNS FOR LEARNING: MATHEMATICS (Elementary)

Regular Summer Semester, 1991

Instructor: Gay Sul

(May 6 - August 2)

Mondays, 1:00 p.m. - 4:50 p.m.

Location: MPX 7500B

PREREQUISITE: Education 401/402 or equivalent.

COURSE DESCRIPTION

This course places emphasis on making math meaningful and exciting for children in the elementary grades. Participants will be actively involved in using a variety of manipulative materials as well as examining strategies that make students successful. These strategies develop an understanding of mathematical concepts before children are required to put pencil to paper.

TOPICS THAT WILL BE COVERED

- Patterning
- Sorting and Classifying
- Beginning Number Concepts
 Place Value and Number Operations
 Problem Solving
 Multicultural Math
- Fractions, Decimals, Percent
- Mental Computation and Estimation Cooperative Grouping
- Data Analysis
- Geometry

- Measurement
- · Probability

- Calculators
- Assessment
- Outdoor Math

EVALUATION

Evaluation will be based on the following:

- attendance and participation
- critique of journal article(s)
- · completion and presentation of individual project
- Piagetian interview with a child
- iournal

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

REQUIRED TEXTBOOK

Van de Walle, John A. Elementary School Mathematics: Teaching Developmentally, Copp Clark Pitman, 1990. ISBN 0-8013-0203-X