SIMON FRASER UNIVERSITY EDUCATION 475-5 DESIGNS FOR LEARNING: MATHEMATICS

Summer Intersession, 1989 (May 8 – June 16) Monday/Wednesday 5:30 - 9:20 p.m. Location: MPX 7610 Instructor: D. Trivett Phone: 224-1159

PREREQUISITES

Educ. 401/402 or equivalent

GENERAL OBJECTIVES

- Extend students' knowledge of mathematics taught in elementary schools
- Examine objectives and rationale for the teaching and learning of math so that practical approaches to topics can be developed
- Broaden the awareness of the range of resources available to teachers of school mathematics

COURSE CONTENT

The mathematical content of the course will cover 3 main areas: geometry, computation and data processing. As well three themes reflecting mathematical process will be stressed: problem solving and problem making, pattern seeking and pattern making, experience and symbols.

REQUIRED ACTIVITIES

- do readings and assignments
- participate in class activities and discussions
- record, report, reflect and question through feedback folder system
- submit a culminating project at close of course. This project is to be a study or an exploration of a topic or area in mathematics teaching of interest or of future use to the students. It must reflect things learned in the course and include areas for classroom activities to enrich and illustrate mathematics.

REQUIRED TEXT

Helping Children Learn Mathematics, Robert E. Reys, Marilyn N. Suydam, Mary Lindquist (0-13-386426-X).

A few supplementary readings will be provided.