

Summer Semester 1998

EDUC 475 - 4
Designs for Learning: Mathematics
(K to 12)
***D05.00**

G. May
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*Location: Kamloops, B.C.
 Mondays and Tuesdays 10:00 am to 2:00 pm

PREREQUISITE

Educ 401/402

COURSE DESCRIPTION

The mathematics curriculum in British Columbia has undergone major changes in recent years. There is new emphasis on understanding mathematical concepts in addition to developing the skills which traditionally have been the focus in most math classrooms.

Participants in this course will examine the concepts and processes outlined in the B.C.'s new Mathematics IRPs. Through a variety of "hands-on/minds-on" activities participants will develop their understanding of the mathematics as well as effective teaching strategies. A variety of contexts beyond the textbook will be explored as means to help students make sense of mathematics, and to develop connections amongst various math topics and the real world. Throughout the course we will be involved in problem solving, sharing and discussing strategies, and exploring a variety of "hands-on" materials (including calculators) for math students of all ages. Strategies for assessing student learning, and developing criterion-referenced evaluation, will also be examined.

OBJECTIVES

On completion of the course it is hoped that participants will feel (more) confident of their understanding of the math content, as well as their ability to plan effective and engaging mathematical instruction.

REQUIREMENTS

Students should expect to complete the following:

- a dual purpose journal, for (1) problem solving and (2) responses to readings
- a presentation to the class demonstrating an idea, activity, or technique for teaching mathematics
- a curriculum project which develops a sequence of lessons, including assessment and evaluation, directly related to the Math IRP.

READINGS

- B.C. Ministry of Education *Integrated Resource Package: Mathematics K to 7 and/or 8 to 10.*
- National Council of Teachers of Mathematics: *Curriculum and Evaluation Standards for School*
- selected articles and book excerpts

- mathematics - project
 - journal -
 - math club - sta -