## SIMON FRASER UNIVERSITY FACULTY OF EDUCATION

## EDUCATION 486-4

## COURSE OUTLINE

Special Topics: Microcomputers in the Classroom

Instructor: Bill Atkinson

Fort St. John

1983-3

DATES: Sept. 10th - Nov. 19th

LOCATION: S.F.U. Site

(every 2nd Saturday)

TIME: 9 a.m. - 6 p.m.

Topics outlined below indicate the content of the course not the order of presentation. Except for the Logo unit, most topics will be dealt with in each session. The indicated number of hours for each unit is a guideline only.

TOPIC 1: Taming the Beast

(10 hours)

- a) computer vocabulary, basic technology, turning it on
- b) Disk Operating System (DOS)
- c) kinks with commercial programs (DOS 3.2, Integer, non-standard DOS)
- d) simple troubleshooting (maintaining disk drives)

TOPIC 2: Logo: the Computer as Metaphor (Thinking about thinking)

(10 hours)

- a) introduction to the turtle, graphics experiments
- b) list handling commands
- c) classroom applications and philosophical orientation

TOPIC 3: Evaluating and Purchasing Software

(12 hours)

- a) PEMC software analysis process
- b) evaluating software for educational validity
- c) CAI, CMI, CML, CAL: terminology, choices, directions
- d) using software in the classroom

TOPIC 4: The Computer as a Personal Tool

(8 hours)

- a) word processing: Magic Window, Bank Street Writer
- b) record keeping, data management
- c) business tools (Visi-Calc, Visi-Dex, DB Master)

TOPIC 5: Programming in Basic

(8 hours)

- a) fundamental programming concepts and procedures
- b) BASIC arrays
- c) "to program or not to program"
- d) other languages: Pascal, Pilot, authoring languages