# SIMON FRASER UNIVERSITY Faculty of Education

#### EDUCATION 485-4

#### COURSE OUTLINE

Special Topics: Microcomputers in the Classroom

Instructor: Gary Morrison Prince George

1983-3

To receive credit for 4 semester hours students must complete 6 of the 8 modules outlined below. Students who wish to complete only 3 modules should have registered for a two credit Directed Study course.

### MOD 1: Computers in Schools: An Introduction (8 hours)

- a) Basic concepts of machine intelligence computer terminology and basic operating procedures for Apple II.
- b) Survey of CML/CAI/CAL/CMI concepts, terminology and secondary operating procedures for Apple II (basic DOS commands).
- c) Beyond the obvious: computers as "mind extenders" and "mind expanders": concepts, terminology and introductory experiences.

## MOD 2: CAI/CML: Computers as "Teaching Machines"

- a) Survey of CAI/CML software and critical appraisal.
- b) Applications of CAI/CML in classroom learning programs: techniques and strategies.
- c) Software evaluation and selection.

# MOD 3: Computers as "Learning Machines"

- a) Concepts and experiences in "intellectual modelling" (e.g. LOGO)
- b) Computers as "mind extenders" creative/divergent applications.
- c) CAL the computer as a functional tool at the disposal of the learner (e.g. - word processing, record keeping from a student perspective.)

# MOD 4: Programming - Myths and Realities

- a) Basic programming literacy in BASIC (i.e. simple logic and arithmetic functions in graphics mode.)
- b) To program or not to program: consideration of the pros and cons of developing programming expertise.

#### Educ. 486-4 Course Outline con't.

#### MOD 5: CMI - Computer as a Tool for Teachers

- a) Word Processing introductory training for teacher applications.
- b) Record Keeping introductory training in teacher applications.

# MOD 6: Nuts and Bolts, Issues and Solutions

- a) Hardware choices issues and selection processes.
- b) Locating and acquiring software.
- c) Equipment "first aid" simple trouble-shooting and remedies.
- d) One computer: 300+ kids!

MOD 7 & 8: Currently under-development. Specific information to be available by September 7, 1983.