Education 486-4 Special Topics:
MICROCOMPUTERS IN EDUCATION

Spring, 1985

Instructor: David Porter

Time/Dates: Thursdays,
4:30 - 8:30 p.m.
Jan. 7 - April 4

Location: MPX 8651

OBJECTIVES

Recent developments in microelectronics have hastened the arrival of computers in the classroom. This course will examine the various ways that computers might influence the teaching-learning process and classroom management.

Students in this course will:

a) develop competencies in the operation of microcomputers.

b) develop skills related to the selection, evaluation and utilization of computer-based learning materials.

c) develop an awareness of the ways computers can be used to support the instructional and administrative tasks of teachers.

d) develop a critical awareness of the role of computers in society and the implication of this for education.

This is an introductory course in which students will develop a level of computer awareness sufficient for the intelligent and critical utilization of existing microcomputer hardware and software. It is not a course designed to prepare teachers to teach computing science courses nor will it prepare teachers to write computer-assisted learning materials.

OUTLINE OF TOPICS:

1. Operation of Microcomputers
a) components and their function
b) connecting peripheral devices
c) programs and programming

2. Modes of computer utilization
a) the computer as instructor
b) the computer as laboratory
c) the computer as object of study
d) the computer as teacher's aide

3. Selection and utilization of software
a) sources of materials
b) evaluation of courseware
c) integrating computers in the curriculum

4. Computer literacy
   a) print and non-print materials on computers
   b) role of computers in schools and society
   c) status of computers in B.C. schools
   d) use and misuse of computers in education

COURSE ACTIVITIES:

Course activities will consist of lectures, demonstrations, readings and laboratories.

EVALUATION:

Evaluation will be based on:

1. a project which demonstrates or explores the use of computers in a selected curriculum area _or_ a paper which reviews the application of computers in a selected curriculum area.

2. a critical evaluation of a piece of software (software review).

3. short assignments or tests related to the lectures and readings.

4. demonstration of computer operating skills involving both hardware and software.

REQUIRED TEXTBOOKS:

Bitter, G. & Camuse, R. _USING A MICROCOMPUTER IN THE CLASSROOM_. Reston, VA, Reston Publishing, 1984.

Peterson, D., _Intelligent Schoolhouse: Readings on Computers and Education_, Reston, VA, Reston Publishing, 1984

PREREQUISITES:

Education 401/402 or equivalent