

# Education 482-4 Designs for Learning: Educational Uses of Computers

Spring, 1991

Instructor: David Bell

Location: Ft. St. John & online

## OBJECTIVES:

Microcomputers are a part of virtually every school in British Columbia. 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.
- e) develop competencies in computer-mediated communication system.

*This is an introductory course in which students will develop a level of computer literacy 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) telecommunications
  - d) 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 a combination of lecture/demonstrations & online discussions. Three in-person sessions will be held (Jan. 11-12, Feb. 8-9 & Mar 29-30 at Charlie Lake School). The Friday sessions will be from 1800-2100 & the Saturday sessions from 0900-16:00. In addition all student will be expected to be active participants in the online sessions of the course. For this, access to a microcomputer and a modem is a requirement of the course.

## EVALUATION:

Evaluation will be based on:

1. a paper reviewing the application of computers in a selected curriculum area (10 pages)
2. a critical evaluation of a piece of software (software review) (2-3 pages)
3. participation in the online & in-person sessions

## REQUIRED TEXTBOOKS:

Mandell & Mandell, Computers in Education Today. West, St. Paul, Min., 1989.

Hirschbuhl & Konet, eds. Computers in Education, 4th Edition. Dushkin Publishing, Guilford, Conn., 1990.

## PREREQUISITES:

Education 401/402 or equivalent.