#### SIMON FRASER UNIVERSITY

# EDUCATION 482-4 DESIGNS FOR LEARNING: EDUCATIONAL USES OF COMPUTERS (E1.00) (Cat #67224)

Regular Summer Semester, 1993 (May 3–July 30)

Tuesday, 5:30-9:20 p.m.

Location: MPX 8651

Instructor: David Bell

PREREQUISITE: EDUC 401/402.

#### **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 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 and 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 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. short tests related to the lectures and readings
- 4. demonstration of computer operating skills

## REQUIRED TEXTBOOKS

Hirschbuhl, John J. (ed.). Computers in Education. Dushkin, 5th edition. ISBN 1-56134-073-1

# SIMON FRASER UNIVERSIT **EDUCATION 482-4**

# DESIGNS FOR LEARNING: EDUCATIONAL USES OF COMPUTERS (E1.00)(Cat. #10020)

Spring Semester, 1993 (January 5—April 2) Tuesday, 4:30 – 8:20 p.m. Location: MPX 8651/2

Instructor: R. Zazkis MPX 8654 Office: 291-3662 Phone:

PREREQUISITE: Educ 401/402.

#### **OBJECTIVES**

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Students in this course will:

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  - d) use and misuse of computers in education

# **REQUIRED TEXTBOOKS**

A set of readings will be available from the Instructor at the first class meeting.

#### TYPICAL ASSIGNMENTS

- 1. A paper reviewing the application of computers in a selected curriculum area.
- 2. A critical evaluation of a piece of software.
- 3. A study unit for 2–3 lessons integrating computers, in student's area of interest.
- 4. Mini-projects, that demonstrate student's proficiency in using a given software (eg. MacDraw, spreadsheet, Logo).