Education 786-4 Special Topics: Microcomputers

in Education

SPRING, 1984   INSTRUCTOR: David Bell

Thursdays, 4:30 - 8:30   LOCATION: on campus

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 implications 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 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 applications 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:

Harper, D. & Stewart, J. Run: Computer Education. Belmont: Brook/Cole, 1983.

Moursund, D. Introduction to Computers in Education for Elementary and Middle School Teachers. Eugene: ICCE (University of Oregon), 1981.

PREREQUISITES:

Education 401/402 or equivalent.