

Education 486-4 Special topics:
Microcomputers in Education

Fall, 1984

Instructor: David Bell/Dave Porter

Wednesday, 5:30 - 9:20.

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 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 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:

Bitter, G. & Camuse, R. USING A MICROCOMPUTER IN THE CLASSROOM. Reston: Reston Publishing, 1984.

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.