

Education 486-4 Special Topics:
MICROCOMPUTERS IN EDUCATION

Dr. Gerri Sinclair

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Instructor: ~~XXXXX~~

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