EDUCATION 482-4

Designs for Learning: Educational Uses of Computers

Fall Semester, 1987
(Sept. 8 - Dec. 4)
Mondays, 4:30 - 8:20
Tuesdays, 12:30 - 4:20
Location: MPX 8651

Instructor: Wolfgang Rothen
Office: MPX 8676
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Prerequisite: Educ. 401/402 or equivalent.

Calendar Description:

Students will develop a critical understanding of the role of computers in education and will learn how microcomputers can be used. The course focuses on learning about computers and software and provide experience with courseware designed for instruction and software tools designed to facilitate the task of teaching.

Objectives

The goal of the course is to provide students with a sense of and actual control over, computer technology and its application as tools for instruction and learning. Initially, we will examine the technical terms that have grown to talk about computer technology. These concepts will be related to instructional applications that are illustrated by demonstrations and laboratory exercises. Students will develop competencies in the operation of various microcomputers; however, we will also access networking and communication technologies. Lectures will emphasize the human, social, and ethical context of computer technology.

Midway our attention shifts more directly toward ways in which computer technology can be implemented in the curriculum and classroom so that it enhances the personal and instructional relationship between teacher and student. Lectures will emphasize procedures for courseware selection and evaluation; models of the instructional process; case studies of computer applications in various subject matter areas; means for creating courseware; and the psychology of human-computer interactions. Students will be expected to apply these issues to their teaching specializations. A review paper assignment will lay the groundwork for the analysis of a computer problem in education. Microteaching exercises are designed to provide an opportunity for concrete experiences in the development of microcomputer-based teaching skills.

Evaluation:

   Participation in classroom discussions.

   Laboratory exercises that demonstrate specific implementations and principles of computer-based instruction.

   Short tests related to lectures and readings.

   A short paper that reviews the application of computer-based technology in a subject-matter area of your choice.

   Microcomputer microteaching exercises.

Required Textbook:

Lockard, J., Abrams, P. D., & Many, W. A. (1987). Microcomputers for educators. Little, Brown & Co.