SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: COMPUTERS IN EDUCATION

CODE NO.: ED 262

SEMESTER: FALL 1989 11/

PROGRAM: TEACHERS' AIDE

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APPROVED:

pate 1/89

TOTAL CREDIT HOURS: 3

PREREQUISITES:

Introduction to Computers

I. PHILOSOPHY/GOALS:

The Computers in Education course has been created in order to present to you information regarding the Apple, IBM, and ICON computers under the following topic areas:

Hardware, Functions, Purposes, Types, Operation, Troubleshooting, and Software.

Much of the information I have collected from textbooks, journals, manuals, catalogues, and practical experience. I hope by exposing you to many types of software and allowing you as much time as possible on the computers, you will increase your computer literacy, become more confident in working with computers, and develop a positive attitude towards computers and technology.

II. STUDENT PERFORMANCE OBJECTIVES

Upon successful completion of this course the student will:

- Review the basic components of a personal computer, including storage devices and peripherals, and describe the functions of each.
- Compare the Apple, ICON and IBM computers in terms of: Components, Operating language(s), Storage capacity, Cost, Useable software.
- 3. Demonstrate the proper operation of an IBM (or compatible), APPLE (IIC, IIe, IIgs), and ICON I computer.
- Evaluate word processing, graphics and educational software.
- 5. Evaluate special needs hardware and software.

III. TOPICS TO BE COVERED:

- 1. Methods of software evaluation.
- 2. Computers and the young child.
- Computers and special needs.
- 4. Troubleshooting.
- 5. Purchasing a computer for yourself or school.
- 6. Utilities.

IV. LEARNING ACTIVITIES

This is a hands on course. Lecture time will be minimal. Our only limitation is the number of computers that are available. We will rotate through the IBM, APPLE and ICON computers on campus in shifts, and you will often work in teams of two. Most of your time will be spent learning and evaluating software.

V. REQUIRED STUDENT RESOURCES (including textbooks and workbooks)

Pottekat, P. Wordperfect 5.0. 1989. Campus Bookstore.

VI. ADDITIONAL RESOURCE MATERIALS (available in the College library)

Titles will be given during the semester. The library has a good section of computer textbooks available for use. Also, the owners' manuals for the Apples, IBMs and ICONs, and software catalogues are available in the Learning Centre.

VII. METHODS OF EVALUATION

The grading system used will be as follows:

A = 90-100% B = 80-90% C = 70-80% R = repeat YOUR FINAL GRADE WILL BE MADE UP OF THE FOLLOWING:

Quiz #1: 10% Quiz #2: 10% Graphic #1: 5% Graphic #2: 5% Book chapter: 30% Software Evaluation: 40% TOTAL: 100%

Each of these requirements is explained below:

QUIZZES (20%):

Two quizzes will be given in class time. Both will be announced in advance and will cover computer components and their safe operation.

SOFTWARE EVALUATION (40%):

In teams of two (2), you will evaluate a minimum of twenty (20) separate educational software programs and their associated documentation. The specific areas to be looked at will be discussed during the first few weeks of class.

GRAPHICS (10%):

Create graphics using any TWO of the following programs:

Printmaster (Apple or IBM), DRAW (ICON), Newsroom, Certificate Maker, or another by agreement.

BOOK CHAPTER (30%):

Because there is no textbook for this course, we will endeavour together to create our own.

The level of information should be understandable, yet informative to your classmates. This is an excellent opportunity for you and/or your partner to teach your topic to others. All information must be correctly referenced. Please clear your chapter outline with me before you spend alot of time on it.

Your information is to be typed up using WORDPERFECT 5.0, and submitted on a 5.25" data disk. Please use your last name as the file name, and create a backup disk in case of loss or damage.

SUGGESTED TOPICS:

How computers work. Computer hardware and its functions.

A comparison of Apple (IIC, IIE, IIgs) and IBM personal computers.

Getting started on the Troubleshooting the APPLE, IBM, APPLE, IBM, ICON. ICON.

Peripheral devices and their safe use.

Data storage.

A look at an ICON computer.

A look into the future of computers.

Computers in Education: How it works, or how it could work in my classroom.

Computers and the Learning Disabled (identify your own subtopic, case study or use an overview)

Computers and the Physically Disabled (identify your own subtopic, case study or use an overview)

"Computers are toys or baby sitters and have no educational value in the classroom!"

"Computer games: Do they have educational value?"

Utility programs: A look at the ways to manage your software.

Computers and the young child, adolescent, or adult.

How the Sault Board of Education sees the use of computers in local schools.

A topic of your choice