SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: COMPUTER PROJECTS

CODE NO.: FOR 362-3   SEMESTER: VI

PROGRAM: FISH & WILDLIFE, PARKS & RECREATION, AND FOREST MANAGEMENT TECHNOLOGY

AUTHOR: ERWIN GOERTZ

DATE: SEPTEMBER 1989   PREVIOUS OUTLINE DATED: SEPTEMBER 1988

APPROVED: _____   _____
          Chairperson   Date

COMPUTER APPLICATIONS II	FOR 358 - 4
COURSE NAME	COURSE NUMBER

TOTAL CREDIT HOURS: 30

PREREQUISITE(S): COMPUTER APPLICATIONS (FOR 367)

I.   PHILOSOPHY/GOALS:

This course furthers the student's ability to operate an IBM compatible microcomputer and allows the student to use software dealing with his/her area of interest.

This is a project-oriented course in which the student will make contact with an outside natural resource agency (MNR, Conservation Authority, Ducks Unlimited, private logging company, tourism association, Algoma Central Railway, Forest Research Centre, Fish Hatchery...) and complete a project using a microcomputer. The project will meet some aspect of the agency's information needs.

In addition to assisting students with their individual projects, class time will be used to introduce students to resource oriented software packages.

II.   STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

1.   Use an IBM compatible microcomputer and the operating system (MS-DOS) with confidence.

2.   Identify microcomputer use in his/her field of interest.

3.   Effectively use natural resource software.

4.   Complete a microcomputer based project for a natural resource agency.

5.   Convey methodology/results of his/her project both orally and in written form.

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III. TOPICS TO BE COVERED:

1. Using MS-DOS and an IBM compatible microcomputer.

2. Running application-oriented software.

3. Software demonstrations.

IV.   LEARNING ACTIVITIES   REQUIRED RESOURCES
                          (optional)

September 07   Introduction to Course/   Software will be
               Project Definition   provided by the
          14   Presentation of Project Topics instructor or the
          21   Software Demonstration   natural resource
          28   Project Assistance   agency involved.

October   05   Software Demonstration
          12   Project Assistance
          19   Software Demonstration
          26   Project Assistance

November 02   Software Demonstration
          09   Project Assistance
          16   Software Demonstration
          23   Project Assistance
          30   Written Summary of Project Due
               Software Demonstration

December 07   Verbal Presentations
          14   Verbal Presentations

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V.   EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE
                            REQUIREMENTS ETC.)

Weekly submissions of progress and attendance   20%
Employer evaluation of project   35%
Written summary of project   35%
Verbal presentation to class   10%

GRADES:

A+	90 - 100%
A	80 - 89%
B	70 - 79%
C	60 - 69%
R	<60%

VI.   REQUIRED STUDENT RESOURCES

A minimum of two (2) double sided, double density 5 1/4" floppy
diskettes.

VII.   ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:

1.   The professional microcomputer handbook REF QA 76.5 .F464 1986

2.   How to buy software: The master guide to picking the right
     program QA 76.6 .G58 1984

3.   Additional reference texts and software may be signed out from
     the instructor.

VIII. SPECIAL NOTES

<u>EXAMPLES OF POSSIBLE PROJECTS</u>

1. Summarize PARKS statistics for one of the provincial parks in the Sault Ste. Marie district.

2. Illustrate to local MNR staff the advantages of using a Geographic Information System (GIS).

3. Summarize field data relating to forest tree research using LOTUS 1-2-3 or one of the common statistical packages.

4. Write a "BASIC" program to be used with a portable data recorder for creel census.

5. Using the PAMAP-GIS, digitize and obtain the skyline buffer zone for tourism designated lakes in the Sault Ste. Marie district.

6. Evaluate wildlife software which could be used by district wildlife staff.

7. Prepare a forest harvesting plan for one or more townships owned by the ACR.

8. Use a wildlife program to manage the white-tail deer population on St. Joseph Island.