SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE:

INTRODUCTION TO COMPUTER APPLICATIONS

CODE NO.:

CET 110 - 3

PROGRAM:

ELECTRICAL & ELECTRONIC

CIVIL

ARCHITECTURAL MECHANICAL

TECHNICIAN / TECHNOLOGIST

SEMESTER:

ONE

AUTHOR:

PETER SAVICH

DATE:

JULY 18, 1989

PREVIOUS OUTLINE

DATED:

MAY 18, 1988

APPROVED:

CHAIRPERSON

DATE

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TOTAL CREDIT HOURS: 45

LENGTH OF COURSE: 3 HOURS PER WEEK FOR 15 WEEKS

PREREQUISITE(S):

NONE

I. PHILOSOPHY / GOALS

THE OBJECTIVE OF THIS COURSE IS TO INTRODUCE THE STUDENT TO THE IBM PC MICROCOMPUTER AND SEVERAL APPLICATION PROGRAMS AVAILABLE. IN ORDER THAT THE STUDENT MAY SEE THE ROLE OF MICROCOMPUTERS AS BEING A USEFUL TOOL IN THEIR FIELD OF WORK, FUNDAMENTAL CONCEPTS SUCH AS MS DOS OPERATING SYSTEM, "GW-BASIC" BASIC LANGUAGE PROGRAMMING, "WORDPERFECT" WORD PROCESSING PROGRAMS, AND "LOTUS 1-2-3" SPREADSHEET CALCULATION PROGRAMS WILL BE DISCUSSED. STUDENTS ARE PROVIDED LAB TIME TO DEMONSTRATE KNOWLEDGE GAINED DURING THE LECTURES.

II. STUDENT PERFORMANCE OBJECTIVES

UPON SUCCESSFUL COMPLETION OF THIS COURSE, THE STUDENT WILL BE ABLE TO:

- 1. TURN ON THE IBM PC MICROCOMPUTER, AND RUN APPLICATION PROGRAMS.
- 2. USE "GW-BASIC" TO EDIT AND RUN SIMPLE BASIC PROGRAMS.
- 3. USE "WORDPERFECT" WORDPROCESSING APPLICATION SOFTWARE TO WRITE DOCUMENTS, LETTERS, ESSAYS, ETC.
- 4. CREATE AND DELETE FILES AND DIRECTORIES USING THE $\dot{\text{MS}}$ DOS COMMANDS.
- 5. USE AN EDITOR TO CREATE BATCH FILES CONTAINING MS DOS COMMANDS.
- UNDERSTAND THE SPREADSHEET SOFTWARE PACKAGE "LOTUS 1-2-3".

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III. TOPICS TO BE COVERED

- 1. BOOTING UP THE MS DOS OPERATING SYSTEM, LEARNING THE MS DOS COMMANDS
- 2. BEGINNING BASIC, LOOPING AND BRANCHING
- LEARNING "WORDPERFECT"
- 4. LEARNING MORE MS DOS COMMANDS
- 5. LEARNING "LOTUS 1-2-3"

IV. LEARNING ACTIVITIES

LEARNING ACTIVITIES

REQUIRED RESOURCES

1.0 BOOTING UP/LEARNING MS DOS

UPON SUCCESSFUL COMPLETION OF THIS UNIT, TEXT: BASIC THE STUDENT WILL BE ABLE TO: PROGRE

TEXT: BASIC
PROGRAMMING
FOR THE IBM PC

1.1 SET THE REALTIME CLOCK AND CALENDAR, FORMAT DISKS, USE THE KEYBOARD

COMPLETE
ASSIGNMENT
PART 1 OF TEXT

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2.0 BEGINNING BASIC

UPON SUCCESSFUL COMPLETION OF THIS UNIT, TEXT: BASIC THE STUDENT WILL BE ABLE TO:

PROGRAMMING FOR THE IBM PC

2.1 USE THE COMPUTER AS A CALCULATOR COVERING MATH OPERATORS, SAVING ASSIGNMENT AND LOADING FILES

PART 2 OF TEXT

2.2 LOOPING AND BRANCHING, INTEGER ASSIGNMENT FUNCTION, RANDOM NUMBERS

PART 3 OF TEXT

2.3 STRINGS, VARIABLE PRECISION AND MATH, DISPLAY FORMATTING

PARTIAL ASSIGNMENT PART 4,5,6 OF TEXT

3.0 LEARNING WORDPERFECT

UPON SUCCESSFUL COMPLETION OF THIS UNIT, TEXT: WORDPERFECT THE STUDENT WILL BE ABLE TO:

HANDS-ON

3.1 GET STARTED WITH WORDPERFECT

ASSIGNMENT CHAPTER 2

3.2 GET HELP FROM WORDPERFECT

ASSIGNMENT CHAPTER 3

3.3 RETRIEVE AND MODIFY A DOCUMENT

ASSIGNMENT CHAPTER 4

3.4 ATTAIN SPECIAL EFFECTS WITH "WP"

ASSIGNMENT CHAPTER 5

3.5 WORK WITH BLOCKS OF TEXT

ASSIGNMENT CHAPTER 6,7

3.6 SHAPE A DOCUMENT

ASSIGNMENT CHAPTER 8,9,10

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4.0 MORE MS DOS COMMANDS

UPON SUCCESSFUL COMPLETION OF THIS UNIT, TEXT: LAB MANUALS THE STUDENT WILL BE ABLE TO:

AND BASIC TEXT

4.1 CREATE, DELETE, RETRIEVE FILES AND SUB-DIRECTORIES

ASSIGNMENT

4.2 USE EDITOR TO CREATE BATCH FILES ASSIGNMENT

5.0 LEARNING LOTUS 1-2-3

UPON SUCCESSFUL COMPLETION OF THIS UNIT, TEXT: LAB MANUALS THE STUDENT WILL BE ABLE TO:

FOR LOTUS 1-2-3

5.1 UNDERSTAND THE PRINCIPLES OF SPREADSHEETS

5.2 SELECT A LOTUS COMMAND FROM A MENU, VIEW A SPREADSHEET, SAVE, RETRIEVE

5.3 CREATE BAR GRAPHS, PIE CHARTS FROM DATA FILES

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V. METHOD(S) OF EVALUATION

1.

THE STUDENT WILL BE ASSESSED THROUGH A SERIES OF THREE (3) WRITTEN TESTS. THESE TESTS WILL EACH BE WEIGHTED TO 20% OF THE FINAL MARK.

THE TENTATIVE DATES ARE: OCT 5 /89
NOV 3 /89
DEC 19/89

THESE TEST DATES WILL BE RE-ANNOUNCED APPROXIMATELY ONE WEEK IN ADVANCE.

2.

THE STUDENT WILL BE ASSESSED THROUGH A SERIES OF UNANNOUNCED QUIZZES. THE TOTAL WEIGHT OF THESE QUIZZES ARE NOT TO EXCEED 10% OF THE FINAL MARK.

3.

THE STUDENT WILL BE ASSESSED THROUGH A SERIES OF LAB ASSIGNMENTS. COLLECTIVELY THESE ASSIGNMENTS WILL BE WEIGHTED TO 25% OF THE FINAL MARK.

4.

THE STUDENT WILL BE ASSESSED ON HIS/HER ABILITY TO ANSWER QUESTIONS ABOUT THE LAB ASSIGNMENT ONCE SUBMITTED. THE STUDENT'S RESPONSE TO THESE LAB DEMONSTRATION QUESTIONS WILL BECOME PART OF HER/HIS "PRACTICAL DEMONSTRATION" MARK. THIS MARK WILL BE WEIGHTED TO 5% OF THE FINAL MARK.

5.

THE STUDENT ATTENDING MORE THAN 80% OF THE TIME WILL RECEIVE A BONUS OF 2%.

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SUMMARY OF FINAL MARK

1.	TESTS	60%
2.	QUIZZES	10%
3.	ASSIGNMENTS	25%
4.	DEMOS	5%
		100%

5. ATTENDANCE 2% BONUS ONLY

COURSE GRADING SCHEME

A+ A B C	90+ 80 - 89 70 - 79 55 - 69	OUTSTANDING ACHIEVEMENT ABOVE AVERAGE ACHIEVEMENT AVERAGE ACHIEVEMENT SATISFACTORY ACHIEVEMENT
U S		UNSATISFACTORY GIVEN AT MIDTERM ONLY SATISFACTORY GIVEN AT MIDTERM ONLY
R		REPEAT
х		A TEMPORARY GRADE THAT IS LIMITED TO INSTANCES WHERE SPECIAL CIRCUMSTANCES HAVE PREVENTED THE STUDENT FROM COMPLETING OBJECTIVES BY THE END OF THE SEMESTER. AN "X" GRADE MUST HAVE THE CHAIRPERSON'S APPROVAL AND HAS A MAXIMUM TIME LIMIT OF 120 DAYS.

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UPGRADING OF INCOMPLETES

WHEN A STUDENT'S COURSE WORK IS INCOMPLETE OR FINAL GRADE IS BELOW 55%, THERE IS THE POSSIBILITY OF UPGRADING TO A PASS WHEN THE STUDENT'S PERFORMANCE WARRANTS IT. ATTENDANCE AND ASSIGNMENT COMPLETION WILL HAVE A BEARING ON WHETHER UPGRADING WILL BE ALLOWED. A "REPEAT" GRADE ON ALL TESTS WILL REMOVE THE OPTION OF ANY UPGRADING AND AN "R" GRADE WILL RESULT. THE HIGHEST ON A REWRITTEN TEST OR ASSIGNMENT WILL BE 56%.

THE METHOD OF UPGRADING IS AT THE DISCRETION OF THE TEACHER AND MAY CONSIST OF ONE OR MORE OF THE FOLLOWING OPTIONS:

ASSIGNED MAKE-UP WORK
RE-DOING PROJECTS
RE-DOING OF TESTS
WRITING OF COMPREHENSIVE SUPPLEMENTAL EXAMINATION

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VI. REQUIRED STUDENT RESOURCES

THE TEXT REQUIRED TO BE PURCHASED BY STUDENTS ARE:

1.

BASIC PROGRAMMING FOR THE IBM PERSONAL COMPUTER BY DAVID A. LIEN, WILLIAM C. BROWN PUBLISHERS, DUBUQUE, IOWA

2.

WORDPERFECT HANDS-ON A SELF-GUIDED TUTORIAL BY GERRY M. LITTON WILLIAM C. BROWN PUBLISHERS, DUBUQUE, IOWA

3.

LOTUS 1-2-3 BY PAV POTTEKKAT SAULT COLLEGE ACADEMIC SERVICES

THE STUDENTS WILL ALSO BE EXPECTED TO PURCHASE APPROXIMATELY 10 FLOPPY DISKS 5 AND ONE QUARTER INCH, DOUBLE SIDED, DOUBLE DENSITY.

VII. ADDITIONAL RESOURCE MATERIALS (AVAILABLE IN COLLÈGE LIBRARY)

THERE ARE MANY OTHER BOOKS ON BASIC PROGRAMMING, WORDPERFECT, LOTUS 1-2-3, AND MS DOS OPERATING SYSTEM.

VIDEO TAPES: THE ONTARIO TV SERIES: THE EDUCATION OF MIKE MACMANNIS. THE 13 PART SERIES COMPUTERS AND

COMPUTER LITERACY.

PERIODICALS: THERE ARE PC MAG, BYTE MAG, COMPUTING CANADA

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VIII. SPECIAL NOTES

FOR THE ELECTRICAL & ELECTRONIC STUDENTS THE CET110 COURSE WILL PROVIDE THEM WITH THE NECESSARY PRE-REQUISITES FOR THE CET205 AND CET228 COURSES OFFERED IN THE THIRD AND FOURTH SEMESTERS OF THEIR PROGRAM. THE CET205 COURSE RETURNS TO THE IBM PC MICROCOMPUTER BUT THIS TIME STUDYING THE 8088 ASSEMBLER LANGUAGE. FOR THE ELECTRICAL AND ELECTRONIC STUDENTS THE CET110 COURSE WILL CONCENTRATE ON THE BASIC PROGRAMMING LANGUAGE MORE THAN FOR OTHER STUDENTS IN OTHER PROGRAMS. ALL "GW-BASIC" PROGRAMMING COMPONENTS WILL BE STUDIED BY REVIEWING THE FUNDAMENTALS OF ELECTRIC CIRCUITS STUDIED CONCURRENTLY IN THE ELR100 COURSE "ELECTRICAL FUNDAMENTALS".

THE ARCHITECTURAL, CIVIL, AND MECHANICAL STUDENTS WILL DISCOVER THAT MANY OF THEIR REQUIRED COURSE WORK WITHIN THEIR PROGRAMS WILL REQUIRE IBM PC MICROCOMPUTER WORK. THE USE OF THE SPREADSHEET PROGRAM "LOTUS 1-2-3" WILL BE STUDIED IN GREATER DEPTH FOR THESE STUDENTS.