

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

COURSE OUTLINE

Course Title: BASIC PROGRAMMING
Code No.: CET100
Program: Electrical/Electronic/Instrumentation Technicians
Semester: One
Date: January 28, 1985
Author: G. Disano

New: _____ Revision: X

for use on
SuperPet

APPROVED: *[Signature]* 85-02-05
Chairperson Date

CALENDAR DESCRIPTION

BASIC PROGRAMMING

CET100

Course Name

Course Number

PHILOSOPHY/GOALS: This course is an introductory computer programming course for first semester Electrical, Electronic & Instrumentation Technician students. Because it is a first semester course it is not intended to be a rigorous problem solving course, but rather a course that will introduce the student to the BASIC language and provide the student with the necessary skills in using the computer required for successive courses.

METHOD OF ASSESSMENT (GRADING METHOD):

See attached sheet: GRADE REQUIREMENTS

TEXTBOOK(S): BASIC for Microcomputers: Apple, TRS-80, PET
by Roger W. Haigh & Loren E. Radford
CBM Professional Computer Guide
by Adam Osborne, Jim Strasma, Ellen Strasma

GRADE REQUIREMENTS

CET100

BASIC PROGRAMMING

(Electrical/Electronic/Instrumentation Technicians)

Your final grade in CET100 will be determined on the basis of four tests to be administered during the semester. Each test will examine your knowledge of a number of topics and will be administered within a week of completing those topics. The topics covered by each of the four tests are as follows:

Test #1	----	Topic Number I
		Topic Number II
Test #2	----	Topic Number III
Test #3	----	Topic Number IV
		Topic Number V
Test #4	----	Topic Number VI
		Topic Number VII

The four tests are of equal weight (i.e. each of the four tests is worth 25% of your final grade). As a result your final grade will simply be an average of your four test results. In order to obtain your letter grade the following percentage-letter grade equivalents will be used:

A:	76% - 100%
B:	66% - 75%
C:	55% - 65%
X or R:	0% - 54%

If your final average is below 55% whether you receive an X (Incomplete) or an R (Repeat) grade is entirely up to the instructor's discretion. The decision will be based upon your final average (i.e. 32% would result in an R grade while 50% might result in an X grade), your attendance during the semester, your attitude while in the classroom, your perceived level of effort during the semester, etc..

In any case, should you find yourself with an X grade at the end of the semester, in order to upgrade your mark to a passing grade you will be required to write a make-up examination covering the entire course content. Should you receive a passing grade on the make-up examination (55% or higher) your X grade will be upgraded to a C grade. The best you can do after receiving an X grade is a C!

Prior to administering any test, you will be notified a full week in advance. Should you for any reason not be able to be in attendance on a day for which a test has been scheduled it is your responsibility to notify the instructor prior to the test! If your reasons are acceptable a date will be set during which you may write the test you have missed.

G. Disano, January 1985

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Topic Number	Topic Description	Reference
I	<p><u>Introduction</u></p> <ul style="list-style-type: none"> - interaction with the computer - the PRINT statement <ul style="list-style-type: none"> - the comma - the semi-colon - mistakes 	<p>Chapter 1 (BASIC)</p> <p>Chapters 2 & 3 (CBM)</p>
II	<p><u>Writing Simple Programs</u></p> <ul style="list-style-type: none"> - program format <ul style="list-style-type: none"> - the END statement - line numbers - BASIC commands <ul style="list-style-type: none"> - the RUN command - the LIST command - the NEW command - the SAVE command - the SCRATCH command - providing program data <ul style="list-style-type: none"> - the ASSIGNMENT statement - VARIABLE names - the INPUT statement - the READ and DATA statements - documentation <ul style="list-style-type: none"> - the PRINT statement - the REM statement 	<p>Chapters 2 & 3 (BASIC)</p> <p>Chapter 4 (CBM)</p>
III	<p><u>Numbers, Variables & Operations</u></p> <ul style="list-style-type: none"> - large and small numbers - string variables - integers - arithmetic operations - exponentiation - square root - complicated expressions - functions - the SIN, COS, TAN & ATN functions 	<p>Chapters 2 & 6 (BASIC)</p> <p>Chapter 4 (CBM)</p>

continued....

IV	<u>Program Control</u>	Chapter 4 (BASIC)
	- the GOTO statement	
	- the IF...THEN statement	Chapter 4
	- Relational Operators	(CBM)
	- the ON...GOTO statement	
V	<u>Loops and Decisions</u>	Chapters 4 & 5 (BASIC)
	- the FOR/NEXT statement	
	- simple loops	Chapter 4
	- nested loops	(CBM)
VI	<u>Subscripts and Arrays</u>	Chapter 7 (BASIC)
	- subscripts	
	- the DIM statement	Chapter 4
	- one-dimensional arrays	(CBM)
	- the RESTORE statement	
	- two-dimensional arrays (matrices)	
VII	<u>Formatting</u>	Chapter 10 (BASIC)
	- the TAB function	Chapter 4 (CBM)

