
N: Textbook and Materials to be Purchased by Students

- Bacon J. P., Understanding and Using MS-DOS/PC DOS (6.X), West Publishing
- Leestma S., Nyhoff L., Turbo Pascal Programming and Problem Solving, Prentice Hall
- Portfolio for Programming Assignments
- Two 31/2" high density diskettes

O: Course Objectives

Students should be able to:

- create, navigate, and delete directory tree structures in DOS and in Windows
- create, edit, backup, print, delete, and generally maintain text files such as batch files and program source files
- design, using a top-down methodology, a structured program to solve a well-defined problem
- implement a program from a design using standard structured programming

Students should understand the concepts of

- programming cycle
- software life cycle and the importance of reusability and maintainability

Students should have experience with

- standard control structures including sequence, selection, and iteration
- functions, procedures and parameter passing (value and reference)
- single dimensional arrays

P: Course Content

The course content below applies to both the lecture and the lab. as they have equal contact time and are in phase.

- 1 Introduction to Computers
 - 1.1 Physical devices, abstractions, and symbolic names
- 2 Files and Directory Trees
 - 2.1 Text files
 - 2.2 Directories
 - 2.2.1 DOS
 - 2.2.2 Windows
- 3 DOS batch files
- 4 Pascal Programming
 - 4.1 Program structure
 - 4.2 Primitive data types
 - 4.3 Control structures: sequential, selection, iteration
 - 4.3.1 Assignment #1
 - 4.4 Function and procedures
 - 4.5 Scoping
 - 4.5.1 Assignment #2
 - 4.6 Arrays
 - 4.6.1 Assignment #3

Q: Method of Instruction

There are three components to the course: lectures, labs., and self directed learning (i.e. programming assignments).

The lecture is used to introduce new material; usually via a sequence of theoretical concepts, then one or more example case studies. The book is to be used as an additional source of problems and examples.

The two hour weekly lab, parallels the lecture by considering the application of the new material. Every lab. is graded.

Assignments are marked according to correctness of the algorithms and coding style.

R: Evaluation

The final grade will be calculated from a particular distribution from the range below. The exact distribution will be given to the student on the first day of classes along with the course outline and necessary policies.

Distribution Range:

13 labs.	=	25% - 35%
2 tests @ 15% - 20% each	=	30% - 40%
1 exam	=	15% - 25%
3 assignments	=	15% - 20%

Example Distribution:

13 labs.	=	30%
test #1	=	15%
test #2	=	20%
assignments	=	15%
exam	=	20%
Total	=	100%