

CS 101 PASCAL PROGRAMMING ( 1 )  
Fall 2004

Instructor: Mr. Husain Ghooloom  
Time: Sat & Mon 9:00 - 10:00 am  
Sun & Tus 9:30 - 11:00 am  
Office Hours: Sun & Tus 11:00 - 12:30 am or by appointment  
Email Address husainghooloom@yahoo.com

Text : PASCAL ( Latest Edition )  
By Elliot B. Koffman

Grading Policy:

|                             |      |
|-----------------------------|------|
| 2 Midterm Exams             | 25 % |
| Lab Exam                    | 10 % |
| Attendance                  | 5 %  |
| Quizzes, Programs, Homework | 10 % |
| Final Exam                  | 50 % |

Scale:

|          |    |         |   |
|----------|----|---------|---|
| 90 - 100 | A  |         |   |
| 85 - 89  | B+ | 80 - 84 | B |
| 75 - 79  | C+ | 70 - 74 | C |
| 65 - 69  | D+ | 60 - 64 | D |
| 0 - 59   | F  |         |   |

1. You are responsible for reading all of the assigned chapters. I recommend that you read them before class so that you will be able to ask questions during the class.
2. Homework will be assigned on occasions from the textbook or via handouts. This is used in order to encourage reading.
3. There will be several programming assignments using Pascal language. Programming assignments are to be done **individually**, unless the assignment specifies otherwise. It is

the violation of the Academic Honor Code to take credit for code written by another person. See the student handbook for the penalties for violations of the Honor Code.

4. All assignments and programs are due by 5 p.m. on the assigned date. **No** late assignments or programs will be accepted after the due date.
5. Short quizzes will be assigned to check up on reading and Programming assignments. Missed quizzes **may not** be made up, but may be dropped from the final grade for verifiable excused absences.
6. There will be two midterm (E1, E2), One lab exam (E3), and one final exam (E4). Makeup exams **will not** be given without prior consent of the instructor.
7. Attendance at all class meeting is expected and will be recorded. Attendance and participation will have a strong indirect effect on your grade for the course. You are responsible for all information explained in the class, some of which may not be available in written form. I **will not** feel obligated to repeat announcements of homework, future quizzes, exams, assignments, schedule changes, or hint on programming assignments. If you are forced to miss a class, it is also your responsibility to get good class notes from a friend and check with me for handouts. **DO NOT** skip a class in order to work on an assignment or a program. That will cause you to get further behind.
8. Please advise me at your earliest convenience ( minimum 1 week ) if you have a disability that will require a reasonable accommodation for the successful completion of this course.
9. If you are experiencing difficulty or are concerned about your progress, please speak with me immediately.

## CS 101 COURSE OUTLINE

### Overview of Computers and Programming

Chapter 1

- Electronic Computers, Then and Now.
- Introduction to Computer Hardware.
- Problem Solving and Programming.
- Overview of Programming Languages.
- Processing a High-Level Language Program.

### Problem Solving and Pascal.

Chapter 2

- The Software Development Method.
- Applying the Software Development Method.
- Overview of Pascal, Reserved Words, and Identifiers.
- Data Types and Declarations.
- Executable Statements.
- General Form of a Pascal Program.
- Arithmetic Expressions.
- Formatting Program Output.
- Debugging and Program Errors.

### Functions and Procedures.

Chapter 3

- Building Programs from Existing Information.
- Functions ( Abs, ArcTan, Cos, Exp, Ln, Round, Sin, Sqr, Sqrt, Trunc, Succ, Pred, Ord, Chr ).

### Selection Structure: If and Case Statements

Chapter 4

- Control Structures.
- Boolean Expressions.
- The IF Statement.
- Syntax Diagram.
- If Statement with Compound Statements.
- Decision Steps in Algorithms
- Nested If Statements and Multiple- Alternative Decisions.
- The Case Statement.
- Common Program Errors.

Repetition: While, For, and Repeat Statements.

Chapter 5

- The While Statement
- Using Loops to Accumulate Sums.
- Event Controlled Loops.
- Loop Design.
- The For Statement.
- The Repeat Statement.
- Nested Loops.
- Difference between While, For, and Repeat.
- Debugging and Testing Programs
- Common Program Errors.