

CS 151 COBOL PROGRAMMING (1)
Summer 2009

Instructor : Mr. Husain Ghooloom
Web Site : www.husainghooloom.com

Email : hg_cs_cbs_paaet@yahoo.com

Time: S M T W 10 am - 1 pm
Office Hours: S M T W 9 - 10 am or by appointment

Text : **COBOL For The 21st Century** (Latest Edition)
By Stern & Stern

Grading Policy:

2 Midterm Exams	30 %
Final Exam	50 %
Lab Exam	10 %
Programs, Home works	10 %

Scale:

95 - 100 A	90 - 94.5 A-	
86 - 89.4 B+	83 - 84.4 B	80 - 82.4 B-
75 - 79.4 C+	70 - 74.4 C	66 - 69.4 C-
63 - 65.4 D+	60 - 62.4 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 Cobol 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. There will be two midterm (E1, E2) and one final exam (E3). Makeup exams **will not** be given without prior consent of the instructor.
6. 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 thee 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.
7. 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.
8. If you are experiencing difficulty or are concerned about your progress, please speak with me immediately.

CS 151 COURSE OUTLINE

Introduction.

Chapter 1

- An Overview of Computer Programming.
- The Applications Program Development Process.
- The Nature of Cobol.
- History of Cobol.
- Techniques for Improving Program Design.
- A Sample of Cobol Program.

Cobol Language Fundamentals.

Chapter 2

- Basic Structure of A Cobol Program.
- Coding Requirements of the Identification Division.
- The Section of the Environment Division.
- Assigning Files to Devices in the Environment Division.

The Data Division.

Chapter 3

- The File Section of the Data Division.
- Types of Data.
- The Working-Storage Section of the Data Division.

The Procedure Division.

Chapter 4

- The Format of the Procedure Division.
- Statements Typically Coded in the Main Module.
 - Open, Read, Perform ... Until, Close, Stop Run.
- Statements Typically Coded for Processing Input Records and Producing Output.
 - Move, Write.
- Comments in Cobol.

Designing and Debugging Cobol Programs.

Chapter 5

- Flowcharts and Pseudocode.
- The four Logical Control Structures.
 - Sequence, Selection, Iteration, and Case Structure.
- Debugging Programs.
 - Syntax Errors.
 - Logic Errors
 - Designing Test Data that is Comprehensive and Realistic.
 - Checking for Logic Errors Using the DISPLAY Statement

Moving Data and Printing Information

Chapter 6

- The Instruction Formats of the Move Statement..
- Numeric Move.
 - Sending and receiving fields Having the Same PIC Clauses,
Different Clauses.
 - Moving Integer, and Decimal portions of Numeric Field.
 - Moving Numeric Literals to Numeric Fields.
- Nonnumeric of Alphanumeric Move.
- Other Options of the Move Statement.
 - Move Corresponding Statement.
 - Performing multiple Moves with a Single Statement.
 - Referencing Segments of a Field using Cobol 85.
- Printing Output.
 - Defining Print Records in WORKING-STORAGE and Printing
Decimal Points, Dollar Signs, Suppressing Leading Zeros,
Asterisks, Plus or Minus Signs, Debit or Credit Symbols,
Blank when zero, Headings, Total Lines, Page Numbers,
Accepting and Printing Date.
 - The Write .. From Statement, The Justified Right Option.
- The READ .. INTO Statement.
- Clearing Fields Using the Initialize Statement.

Computing in Cobol.

Chapter 7

- The Basic Arithmetic Verbs.
 - Add, Subtract, Multiply, Divide.
- Options Available With Arithmetic Verbs.
 - Rounded, On Size Error, Not on Size Error.
- The Compute Statement.
- Use of Signed Numbers in Arithmetic Operations.

Decision Making Using The IF and EVALUATE Statements. Chapter 8

- Selection Using a Simple IF Statement.
- Selection Using Other Options of the IF statement.
 - Nested Conditional, Compound Conditional, OR, AND, Sign and Clauses Test, Negating Conditionals.
- The Cobol 85 EVALUATE Statement: Using the CASE structure
as an Alternative to Selection.

- The Simple Perform, The Nested Perform, and Executing a Group of Paragraphs with a Simple Perform.
- The Use and the Misuse of the GO Statement
- The Exit Statement.
- Iteration Using Other Types of Performs such as Perform .. Until, Perform .. Varying.
- Using Nested Perform .. Varying Statements.
- A Review of Scope Terminators.