

Chemeketa Community College
4000 Lancaster Drive NE
PO Box 14007
Salem, Oregon 97309

Course Outline

Course Identification CIS121 **Credits** 4 **Date** 6/06

Course Title: Computer Information Science 2

Total Instructional Hours, for Course, per Term:

44 Lecture Hours = 4 Credit(s)
0 Laboratory Hours = 0 Credit(s)

Prerequisite Course(s):

CIS120 Computer Information Science 1 or take concurrently; or consent of instructor

Required Text(s):

Crews, *Programming Right from the Start with Visual Logic*, Prentice Hall
Koneman, *Visual Basic.NET Programming for Business*, Prentice Hall

Course Description:

Introduces fundamental logic in designing specific algorithms for processing information typified by management information systems and the logical thought process used when programming. Covers structured programming and object oriented programming concepts that include problem definition, generating a description of its step-by-step solution (the algorithm), writing the program, and finally documenting your program. Second of the three core CIS courses and is applicable to non-CS majors.

Performance Based Learner Outcomes:

Upon successful completion of the course, students should be able to:

1. Use standard design tools such as hierarchical charts, IPO diagrams, and structured algorithm tools (i.e., flowcharting, Pseudo English, Warnier-Orr) to develop information science solutions.
2. Draw a flowchart of a process involving sequence, selection, and iteration, and write one or two sentences describing the process.
3. Use an object language to write the code for a program solution from a standard design chart or diagram algorithm.
4. Depict how to document code describing processes for later maintenance.
5. Define common terms related to object programming such as object, properties, methods and events.
6. Identify and use coding standards for variables, constants, and object naming.

7. Design effective user interfaces.
8. Demonstrate understanding of the nested conditional statements by completing a program walkthrough.
9. Demonstrate understanding of the nested loop structures by completing a program walkthrough.

Course Content Outline:

- I. Management Information Systems Logic Design and Concepts
- II. Program Language Generations
- III. Flowcharting and Programming Structures
 - A. Sequence
 - B. Selection (If and Select Case)
 - C. Iteration (For and Do While)
- IV. Operator Precedence
 - A. Mathematical
 - B. Relational
 - C. Logical
- V. Integrated Design Environment (IDE)
- VI. Objects, Properties, Methods, and Events
 - A. Form
 - B. Label
 - C. Textbox
 - D. Button
- VII. Visual Basic Program Coding and Syntax
- VIII. Variables and Constants
- IX. Functions
 - A. Val
 - B. Format