

Degree Credit X
Non Credit
Nondegree Credit
Comm Service

COURSE OUTLINE

COMPUTER INFORMATION SYSTEMS 1A

COURSE DESCRIPTION

3 Units

1A Introduction to Computer Information Systems

PREREQUISITE: None. Concurrent enrollment in CIS-96 or CIS-97 is recommended.

An introduction to computer concepts, theory, and computer applications. Functions and capabilities of word processors, spreadsheets, databases, presentation graphics and the Internet are covered through lecture, discussion, and hands-on computer assignments. Concepts covered include types of software, hardware components, and operating systems with an emphasis on terminology and functionality. A total of 54 hours lecture.

SHORT DESCRIPTION FOR CLASS SCHEDULE

An introduction to computer concepts, theory, and computer applications. Functions and capabilities of word processors, spreadsheets, databases, presentation graphics, and the Internet are covered through lecture, discussion, and hands-on computer assignments.

LEARNING OBJECTIVES

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

1. Identify the fundamental computer concepts and terminology used for input, processing, output, and storage.
2. Identify the key features of a variety of software such as operating systems, word processors, spreadsheets, databases, and graphics.
3. Apply the principles of and solve problems with word processing, spreadsheet, database, and file management programs.
4. Create electronic presentations with presentation graphics.
5. Use the Internet to send electronic mail, search for information and manage files.

COURSE CONTENT

TOPICS

- I. Computer Concepts and Theory
 - A. Overview Concepts and Theory
 - 1) The Information Processing Cycle
 - 2) Components of a Computer
 - 3) Computer Software
 - 4) Networks and the Internet
 - 5) Categories of Computers
 - 6) Elements of an Information System
 - B. The Internet and World Wide Web
 - 1) History of the Internet
 - 2) Accessing the Internet
 - 3) Electronic Commerce
 - 4) Web Publishing
 - C. Application Software
 - 1) Word Processing
 - 2) Spreadsheet
 - 3) Database
 - 4) Graphics, Presentation Graphics and Multimedia
 - 5) Communications
 - D. The System Unit
 - 1) Motherboards
 - 2) Central Processing Unit
 - 3) Data Representation
 - 4) RAM, ROM, and Cache Memory
 - 5) Expansion Slots and Cards
 - 6) Ports, Buses, Bays, and Power Supplies
 - E. Computer Input
 - 1) Keyboard
 - 2) Pointing Devices
 - 3) Voice
 - 4) Digital Cameras and Video
 - 5) Scanners and Reading Devices
 - F. Computer Output
 - 1) Display Devices
 - 2) Printers
 - 3) Speakers and Headsets
 - 4) Terminals
 - G. Secondary Storage
 - 1) Magnetic Disks
 - 2) CDs and DVDs
 - 3) Magnetic Tapes
 - 4) Non-Digital Storage
 - H. Operating Systems and Utility Programs
 - 1) Functions and Types
 - 2) Stand-Alone
 - 3) Network
 - 4) Embedded
 - 5) Utilities

II. Applications

A. Windows

- 1) Communicating with Windows
- 2) Keyboard and Keyboard Shortcuts
- 3) Desktop Views
- 4) Launching an Application
- 5) Using Help

B. Internet

- 1) The Internet and the World Wide Web
- 2) Web Browsers
- 3) URL's
- 4) Bookmarks
- 5) Saving Information
- 6) Printing Web Pages
- 7) Using Search Engines
- 8) Downloading Files
- 9) Electronic Mail

C. Word Processing

- 1) Creating and Editing Documents
- 2) Entering Text
- 3) Entering Graphics
- 4) Formatting Text
- 5) Saving and Printing Documents
- 6) Grammar and Spell Checking Documents
- 7) Adjusting Line Spacing
- 8) Adjusting Margins
- 9) Inserting Hyperlinks
- 10) Cutting, Pasting, Copying, Moving Text
- 11) Selecting and Replacing Text
- 12) Creating Headers and Footers
- 13) Using Wizards
- 14) Setting Tabs
- 15) Creating and Formatting Tables

D. Spreadsheets

- 1) Creating and Editing Worksheets
- 2) Entering Text
- 3) Entering Numbers
- 4) Entering Formulas and Functions
- 5) Saving and Printing Worksheets
- 6) Creating Charts
- 7) Formatting Cells
- 8) Cutting, Pasting, Copying, Moving Cell Contents
- 9) Spell Checking Worksheets

E. Databases

- 1) Introduction to Databases
- 2) Designing a Database
- 3) Creating a Database Structures
- 4) Saving Database Structures
- 5) Adding Records to Tables
- 6) Printing Tables
- 7) Creating a Queries
- 8) Creating Reports
- 9) Calculating Statistics
- 10) Sorting Data in a Query
- 11) Joining Tables
- 12) Saving and Printing Queries

F. Presentation Graphics

- 1) Design Templates
- 2) Creating Slides
- 3) Setting Text Attributes
- 4) Viewing the Presentation
- 5) Spell Checking Presentation
- 6) Cutting, Pasting, Copying, Moving Text
- 7) Adding Graphics to Slides
- 8) Adding Animation Effects
- 9) Saving and Printing Presentation

G. Software Integration

- 1) Creating a Web Page
- 2) Creating a Web Site
- 3) Creating Hyperlinks
- 4) Sharing Information among Word Processing Documents, Spreadsheets, Databases, and Presentation Graphics Applications

H. File Management

- 1) Windows Explorer and My Computer
- 2) Creating Folders
- 3) Copying and Moving Files and Folders
- 4) Deleting Files and Folders
- 5) Renaming Files and Folders

Students are also assigned reading, writing and other outside assignments equivalent to two hours per one-hour lecture.

METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

Class lectures/discussions/demonstrations
Videos/films/slides/audio tapes
Pair and small group activities/discussion
Class exercises
Reports and papers
Handouts
Cooperative learning tasks
Individual conferences
Guest lecturers
Online

METHODS OF EVALUATION

Students will be evaluated for mastery of learning objectives by methods of evaluation, which may include, but are not limited to:

- Oral reports/presentations/performance
- Written reports/presentations
- Quizzes/examinations
- Computer programs
- Written assignments
- Class and individual projects
- Participation and regular attendance
- Laboratory projects/performance
- Final examination

COURSE MATERIALS

All materials used in this course will be periodically reviewed to insure that they are appropriate for college level instruction. Possible texts include:

Shelly, Cashman and Vermaat. Discovering Computers 2002, Concepts for a Digital World. Course Technology. 2001.

Shelly, Cashman and Vermaat. Office 2000, Introductory Concepts and Techniques. Course Technology. 2001.

6/12/2001