Las Positas CurricUNET

LAS POSITAS COLLEGE

Las Positas College
3000 Campus Hill Drive
Livermore, CA 94551-7650
(925) 424-1000
(925) 443-0742 (Fax)

Course Outline for CIS 8

ESSENTIAL COMPUTING SKILLS

Effective: Fall 2006

I. CATALOG DESCRIPTION:
   CIS 8 — ESSENTIAL COMPUTING SKILLS — 2.00 units

   What everyone needs to know. Fundamental computer competency course designed to develop the basic computer skills and knowledge required in today's technological world. Basic computer competency is no longer a nicety, but rather a necessity. Topics include; essentials of computing, hardware and software concepts, the Internet, ethical issues, and information protection. Practical hands-on applications will introduce students to the fundamentals of word processing, spreadsheets, presentation software, and email communication. Use of the technology to identify, gather, and analyze information and for communication, and understanding the legal, ethical and societal implications of technology. No previous experience with computers is required.

   1.50 Units Lecture 0.50 Units Lab

   Grading Methods:
   Letter or P/NP

   Discipline:

	MIN
Lecture Hours:	27.00
Lab Hours:	27.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 3

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:
   Upon completion of this course, the student should be able to:
   A. Identify the major components of a computer and their functions
   B. Use a personal computer and its Graphical User Interface (GUI) effectively
      1. Initiate and terminate a computer work session (e.g. "powering-on" a computer, successfully logging into a computer network, and shutting down a computer)
      2. Manage the desktop (e.g. starting and exiting application programs, manipulating windows)
      3. Multitask (e.g. switch between multiple concurrent application programs, transfer information between two documents and/or applications)
   C. Use word processing software at a basic-level including
      1. Use a computer keyboard to enter text into a document
      2. Use the appropriate commands to edit text (e.g. add new text to an existing document, delete text, move text)
      3. Apply and remove basic formatting (e.g. change margins, line spacing, character formatting)
      4. Produce a hard copy of a document
   D. Use presentation graphics software at a basic-level mastery including
      1. Create a bulleted list presentation from an outline
      2. Edit a slide presentation (e.g. add new slides, edit slide text, delete slides, reorder or reposition slides) as needed
      3. Work with graphics, including inserting clipart or other graphic formats, resizing and repositioning images
      4. Animate presentation text and/or graphics
      5. Use the appropriate navigation controls to mechanically deliver a slide show
      6. Generate the appropriate hard copy printouts (i.e. presentation slides for the speaker and handouts for the audience)
   E. Use spreadsheet software at a basic-level including
      1. Enter text and numbers into a given spreadsheet cell
      2. Create spreadsheet formulas combining the appropriate mathematical formulas and/or built-in functions and the appropriate cell references.
      3. Apply and remove simple cell formatting (e.g. number styles, character formatting styles)
      4. Produce a hard copy of a spreadsheet
   F. Use a WWW browser effectively
      1. Construct the appropriate URL using the WWW naming conventions (i.e. guess the correct URL)
      2. Display a web page given a specific URL
      3. Issue the commands to follow a graphical or textual hyperlink
      4. Use the browser's navigation controls to efficiently navigate
      5. Save a given URL for future reference
   G. Use the Internet effectively as a source of information

1. Select the appropriate keywords for an Internet search given a problem statement
2. Use a search engine efficiently by performing advanced queries (e.g. Boolean AND searches and exact quote searches)
3. Use the appropriate WWW browser commands to efficiently search for a keyword(s) in a lengthy multi-page document (e.g. Find in Page feature)
4. Use the appropriate WWW browser commands to print a small select number of pages in a lengthy multi-page document (e.g. Print Preview and Print commands)

H. Perform common file management tasks
1. Work with files during a single computer work session and over multiple work sessions
2. Display a storage device's hierarchical folder/directory structure and then navigate to a specific drive/folder and display the contents
3. Create a given folder/directory structure on a 3.5" floppy disk
4. Manipulate files and folders (e.g. copy files from an arbitrary drive/folder to an arbitrary drive folder, rename a given folder and/or file, delete a given file and/or folder)
5. Erase and format a floppy disk as required

I. Use electronic forms of communication
1. Create, send, and retrieve electronic mail
2. Recognize a valid Internet e-mail address
3. Create an e-mail message including both the message body and the subject line
4. Send a given e-mail to a single recipient and/or to multiple recipients
5. Send an e-mail attachment (e.g. word processed document, JPEG image)
6. Use newsgroups/bulletin board systems (e.g. create messages, post and reply to messages)

J. Understand the software-ethics issues and concerns of software copyright, copyright infringement, copyright protection, software piracy
K. Understand and implement information protection, using virus protection, firewalls
L. An understanding of computer hardware and software;
M. An understanding of, and the ability to use, graphical and command-line interfaces;
N. A working knowledge of the following Internet-related tasks: communicating via Email, Web browsing, and information retrieval using Web resources;
O. A working knowledge of data processing tasks using word processors and spreadsheet applications;
P. The ability to find resources in the library using a range of available electronic facilities;
Q. The ability to critically evaluate resources found on the Internet and in the library.
R. Develop the computer proficiency required for University study;
S. Provide students with practical computer usage experience;
T. Develop skills in document and data processing, effective Internet usage, and electronic library resources;
U. Develop the skill to independently master unseen computer applications and new computing environments.

V. CONTENT:
A. Computer Concepts and Windows
1. Basic computer and Windows concepts
2. Turning on the Computer
3. Behind the Screen: Computer Hardware and Software - Describes the basic distinction between hardware and software and a definition of operating systems
4. Correct Mousing
5. Behind the Screen: External Hardware (Peripherals) - Teaches about the keyboard and monitor.
6. The Desktop
7. The Taskbar
8. The Start Button and its Menus
9. Starting Programs
10. Behind the Screen: About Operating Systems - A description of Windows and a summary of the roles it plays allowing you to control the computer.
11. Common Program Features
12. Quick Sizing Buttons
13. Drop-down Menus
14. Tool Buttons
15. Dialog Boxes
16. Behind the Screen: Inside the Box - Describes the system unit case, central processing unit, and RAM
17. Basic Editing Techniques
18. The Cursor and the Mouse Pointer
19. Moving the Cursor with the Mouse
20. The End and Home Keys
21. The Enter Key
22. Turning Off the Computer

B. Keyboarding
1. Skill Building
2. Use keyboarding software
3. Key alphabetic keys by touch
4. Key numbers by touch using the numeric keypad
5. Save files and generate Summary Reports
6. Key a minimum of 30 gwam with 3 or fewer errors in a 3-minute timing

C. Word Processing
1. Using Word
2. Basic text formatting and editing skills with Word, including the cut, copy, and paste commands.
3. What Is a Word Processor?
4. Introducing the Word Screen
5. Word Compared to WordPad
6. Behind the Screen: About Application Programs - Defines application programs, compares them to operating system and saved user files.
7. Inserting Text
8. Saving Your Work
9. Behind the Screen: Storage Device Basics - Covers storage devices such as disk drives, floppies, and USB flash drives
10. Saving a Document for the First Time, saving a Modified Document
11. Printing and Closing a Document
12. Behind the Screen: About Computer Printers - Cover ink-jet, laser, and all-in-one printers
13. Editing Documents
14. Opening a Previously Saved Document
15. Starting a New Blank Document
16. Selecting Text for Editing
17. Using Cut, Copy, and Paste
18. Selecting Text

19. Undoing a Command
20. Behind the Screen: About Computer Keyboards - Describes the computer keyboard and some of the special keys such as [Ctrl], [Home], [Delete] and others
21. Using Editing Tools, Autocorrect, Spell Check
22. Controlling the Size and Shape of a Window
23. Sizing Windows
24. Scrolling Within Windows

D. Managing Files
1. Basic file browsing and file management skills using the My Computer and Exploring windows. Also covers moving, copying, deleting and undeleting files
2. Browsing and Managing Files
3. The Windows Control Panel
4. Some Common Control Panel Tasks
5. Opening the Control Panel
6. Setting Mouse Properties
7. More about Mouse Motions
8. Double-Clicks
9. Behind the Screen: Computer Video - Describes how computers display the video you see on the screen. Also compares CRT and LCD monitors.
10. How Windows Organizes Files
11. The File Organization Hierarchy
12. The My Documents Window
13. Folders Compared to Files
14. The My Documents Folder
15. Features of the My Documents Window
16. Opening Files
17. Using, creating, opening folders
18. Moving and Copying Files
19. Cut, Copy, and Paste for Files
20. The Undo Command
21. Moving Multiple Files
22. Copying Files with the Copy Command
23. Behind the Screen: Ease-of-Use and Software Standards - How standard software conventions make it easy to apply commands you've learned in one program to other programs.
24. Deleting and Restoring Files
25. The Windows Recycle Bin, Emptying the Recycle Bin

E. The Internet and Email
1. Browsing the Web
2. Basic skills of navigation in Web sites. Concepts covered include setting the browser's home page, URLs, and the types of links on typical Web pages.
3. Connecting to the Internet
4. Internet Service Providers
5. Types of Connections
6. Behind the Screen – Modems - Describes modems and how connect to the Internet.
7. Launching Internet Explorer
8. The Home Page
9. The Internet Explorer Window
10. Navigating the Web
11. Navigating with the Address Bar
12. URLs
13. Behind the Screen: Domains - Explains domain names and top-level domains.
14. Varieties of Links
15. Behind the Screen: Performance of the Internet - Describes factors that can affect the performance of Web pages.
16. asic Navigation Buttons
17. Making Multi-page Jumps
18. Setting a New Home Page
19. Browsing via History
20. Behind the Screen: Spyware and Adware - Covers Spyware, Adware, and utilities to combat them.

F. Searching the Web
1. Basics of searching with the popular Google search engine and how to navigate within websites.
2. About Internet Search Engines
3. How Search Engines Work
4. Selecting a Search Engine
5. Searching the Web
6. Search Methods
7. Performing a Standard Search
8. Selecting Search Words
9. Interpreting Search Results
10. Behind the Screen: The Order of Hits - Explains Internet search engines display search results and how some companies may pay to appear higher in the results list.
11. Opening Additional Browser Windows
12. Printing Web Pages
13. Creating, Using, Organizing Favorites

G. Webmail Basics
1. Basic skills for sending, receiving, and replying to email messages using Yahoo! Mail.
2. About Electronic Mail
3. Webmail Compared to Email
4. Signing Up for a Webmail Account
5. Logging in to Webmail
6. Sending an Email Message
7. About Email Addresses
8. Composing a New Message
9. Behind the Screen: How Email reaches its Destination - How email makes its way from your computers to the recipient's computer.
10. The Inbox
11. Email Message Folders
12. The Send/Receive Command
13. Receiving Messages
14. New Message Notifications
15. Setting Send/Receive Options

16. Reading Incoming Messages
17. Behind the Screen: Email Spam - Define spam and recommendations on how to avoid it.
18. Replying to Messages
19. Reply Compared to Reply to All
20. Including the Previous Message
21. Emoticons :-)
22. Forwarding Messages
23. Behind the Screen: Email Scams - Describes common email scams (too-good-to-be-true, phishing) and recommendations to avoid them.

H. Attachments and Message Management
1. Basics of attaching files to email messages, and opening and saving attachments sent by others. Downloading Files
2. Downloading Files from Web Pages
3. Email Attachments: receiving, saving, sending
4. Attachments and Viruses
5. Behind the Screen: Computer Viruses - Defines computer viruses, how they may be transmitted, and utilities to combat them.
6. Managing Messages: This topic using Outlook Express rather than Webmail to show students how an email client compares to Webmail learned in Lesson 6.
7. Message Folders
8. Deleting Messages

I. Spreadsheets
1. Creating and Editing a Simple Worksheet using MS Excel
2. What Is Microsoft Excel 2003?
3. Worksheets and Workbooks
4. Entering Data
5. Undo and Redo
6. Text Entries, Number Entries
7. Save Concepts
8. Editing Entries, Selecting Cells , Aligning Cell Entries
9. AutoSum
10. AutoCalculate
11. Printing, Print Preview
12. Opening, Closing, Saving Workbooks
13. Formulas
14. Formatting Entries, Number Formats
15. Clearing Cell Contents and Formats
16. Functions
17. Cut, Copy, and Paste
18. Drag and Drop
19. Right Dragging
20. Cell Borders
21. AutoFormat
22. Managing Worksheets
23. Chart Concepts
24. Column Charts and Bar Charts
25. Previewing and Printing Charts

J. Presentations
1. Creating and Delivering a Presentation using MS PowerPoint
2. Design Templates
3. Adding Slides and Changing Layouts
4. Text Layouts
5. Saving a Presentation
6. Moving and Copying Text and Objects
7. Formatting Text and Paragraphs
8. Working with Outlines
9. Deleting Slides
10. Changing Paragraph Alignment
11. Rearranging Slides
12. Speaker Notes
13. Printing and Print Preview
14. Output Formats
15. elivering an Electronic Slide Show
16. Clip Art, Transitions, and Animation
17. Adding Clip Art to Slides
18. Transitions
19. Animation
20. Slide Timings
21. Preparing Slide Shows for Delivery

VI. METHODS OF INSTRUCTION:
A. Lecture and classroom discussion with demonstrations
B. Lab experience: Hands-on lab assignments
C. Periodic examinations
D. Read text and other supplemental sources (example, Internet sites)
E. PowerPoint presentations
F. Computer demonstrations with overhead display panel

VII. TYPICAL ASSIGNMENTS:
A. Reading
1. Read the chapter on File Management, Virus Protection, and Backup
2. Read the U.S. Department of Labor Bureau of Labor Statistics Occupational Outlook Handbook Web Developer jobs
B. Hands-on lab assignment, such as:
1. using word processing software to create a memo
2. using a spreadsheet program to create a budget
3. using a database to add, delete, find and edit records
4. create a webpage and upload to a host site

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Quizzes
3. Class Participation
4. Lab Activities
5. Other:
    a. Methods
        1. Chapter quizzes, mid-term, and final examination
            a. Typical questions: Objective
                1. RAM stands for _____.
                    1. Random access memory
                    2. Read access memory
                    3. Random applied memory
                2. HTML stands for _____.
                    1. Hypertext Markup Language
                    2. Hide Text Markup Language
                    3. HyperTension Markup
        2. Graded hands-on lab assignments
            a. Word processing
            b. Spreadsheet
            c. Presentation software
            d. Email
            e. Internet browsing and searching
        3. Relevant active participation

B. **Frequency**

    1. Frequency
        a. Chapter quizzes, mid-term exam and a final examination
        b. Weekly hands-on lab assignments utilizing basic features of common software applications that demonstrate and reinforce mastery of the various software tools

IX. TYPICAL TEXTS:
    1. Stolins *Welcome to the World of Computers.*, Labyrinth Publications, 2005.
    2. Parsons and Ojai *Practical Computer Literacy.*, Course Technology, 2005.

X. OTHER MATERIALS REQUIRED OF STUDENTS:
    A. Mobile storage device: zip disk, flash drives, CD RW
    B. Access to the World Wide Web with any major Web browser
    C. MS Office software: Word, Excel, Powerpoint