CIS121

Introduction to Computer Information Systems

Course Syllabus

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Pierce College, Lakewood, WA

Computer Ethics and Standards

The willful abuse of Pierce College CIS/CNE/DDSGN computer systems, hardware and/or software, which renders the system(s) inaccessible or unavailable to other students, staff, or faculty and necessitates the repair, replacement, rebuilding, regeneration, or reloading of hardware and/or software may be grounds for an instructor issuing a failing grade for the course.

Willful abuse includes but is not limited to the following examples:

- Implementing passwords for video screen savers.
- Knowingly loading or transmitting viruses by any means to a CIS/CNE/DDSGN computer system.
- Formatting, re-formatting, converting, or partitioning hard drives except under the expressed and explicit direction and supervision of a CIS/CNE/DDSGN faculty/staff member or Pierce College Institutional Technology (IT) staff member.
- Deleting or moving data or information from network drives except at the expressed and explicit direction and supervision of a CIS/CNE/DDSGN faculty/staff member or IT staff member.
- Loading software onto CIS/CNE/DDSGN computer systems except at the expressed and explicit direction and supervision of a CIS/CNE/DDSGN faculty/staff member or Pierce College IT staff member, approved by IT, and properly licensed to Pierce College.
- Using a character string other than "**password**" for the password in CIS/CNE/DDSGN classes where computer security, accounts, permissions, logon procedures, etc., are taught and practiced. No passwords shall be implemented without the explicit direction and supervision of a CIS/CNE/DDSGN faculty/staff member or Pierce College IT staff member. The character string "password" is the **only** authorized password to be used. Special circumstances during some CIS/CNE/DDSGN courses may require unique passwords which may be used only under the expressed and explicit direction and supervision of a CIS/CNE/DDSGN faculty/staff member.

Unauthorized Activities:

While attending classes conducted in a computer lab, students will not engage in any activity that is not directly related to class instruction, objectives, outcomes, or learning activities during the prescribed class times. Any student engaging in non-class activity will be directed to immediately cease the activity. Failure to immediately cease the unauthorized computer activity may be grounds for the student's removal from the lab and possible course failure. Examples of unauthorized activities during class include: computer games, email, and web surfing.

CIS121 Diagnostic Assessment

Name: _____ Class Time: _____

1. What is a computer?

2. What is data?

3. What is information?

4. Who invented/developed the internet?

5. How does the internet work?

6. What is the primary objective of information systems?

7. What is the most common input device?

8. What is the most common output device?

9. What is the difference between system software and applications software?

10. What is a MODEM and what does it do?

11. What is the systems development life cycle?

12. Why is a computer dumb?

Paragraph is **Bold**, centered, and 12 pt.

Memorandum

Date: Today's date

Bold

To: Mr. Scott, CIS121 Instructor, Pierce College

From: Your Name, CIS121 Student, Pierce College

Subject: CIS121 Lab Assignment

In this lab assignment we are using Microsoft Word to create, edit, format, and print a word processing document. In the course of this exercise we will see how a word processor handles word wrapping, alignment, special indents for paragraphs, font and paragraph formatting. You only need to press the <Enter> key at the end of a paragraph whether the paragraph is a blank line, a letter, a word, a sentence, or a multiple sentence "paragraph". As you type, try to use good typing practices of two spaces after colons and periods, one space after commas and semicolons, and two spaces between the state abbreviation and zip code in an address.

Paragraphs are double spaced with a ½" first line indent.

Paragraph is single spaced, indented ½" from the left and right margins, and justified.

In order to experiment with editing functions like cut, copy, and paste, you will need to follow the Windows paradigm of "selecting first, then performing your operation". Make sure the insertion point, i.e. the cursor, is where you want text inserted or pasted. You should also practice using the mouse to select a word, series of words, line, paragraph, and entire document by pointing and clicking/double clicking/or dragging as appropriate. **This sentence is bold. You can turn bold on or off by <clicking> on the bold button on the formatting toolbar or pressing <ctrl> + <b> on the keyboard.** *This sentence is in italics. Turning on/off italics works just like bold except the keyboard keystrokes are <ctrl> + <I>.* ***This sentence has all three, bold, italics, and underline***.

While the default MS Word template generally establishes Times New Roman as the default font face with a point size of 10 and one inch top/bottom and 1 ¼" left/right margins, you can experiment with changes either by using a dialogue box or the rulers. The procedures you use will become largely a matter of personal preference depending on the view you prefer for your typing.

Note: This is an example of a word processing document that you are required to submit for homework credit.

CIS121 Lab Exercise for Excel

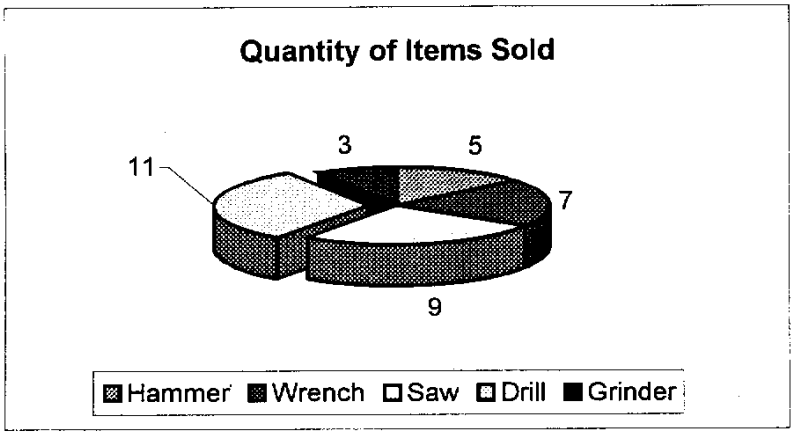
Dailey Hardware Sales

Item	Qty Sold	Cost	Sale Price	Margin	Gross
Hammer	5	$ 3.50	$ 7.00	$ 3.50	$ 17.50
Wrench	7	$ 1.75	$ 4.50	$ 2.75	$ 19.25
Saw	9	$ 4.35	$ 12.00	$ 7.65	$ 68.85
Drill	11	$ 7.25	$ 21.00	$ 13.75	$ 151.25
Grinder	3	$ 21.35	$ 49.00	$ 27.65	$ 82.95
				Total	**$ 339.80**

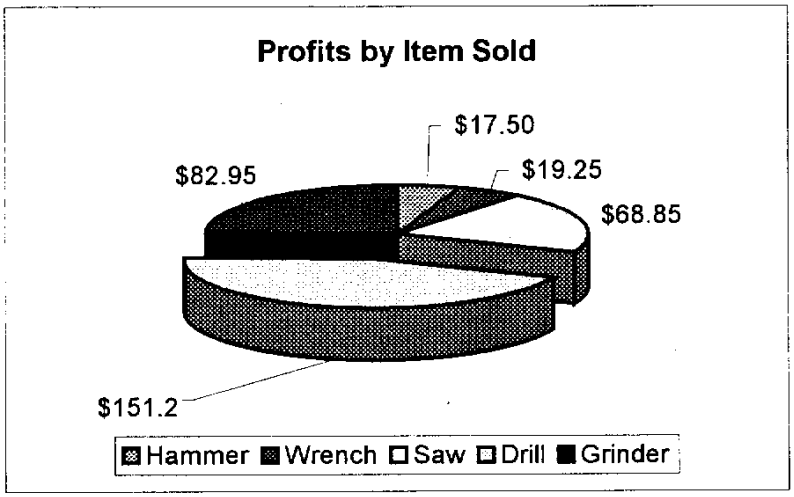
Cells A!:F1 merged with contents of A1 centered.

Content of A3:F3 centered in each cell, bolded, and underlined. Cells C4:F8 formatted to currency style.

Autosum function used for F9.



Ranges A4:A8 and B4:B8 used for this 3D pie chart.



Ranges A4:A8 and F4:F8 used for this 3D pie chart.

Note: This is an example of a spreadsheet and pie chart you are required to submit for grade. Be sure to use the appropriate formulas to calculate the margin, gross, and total.

CIS121 Lab Exercise for Excel

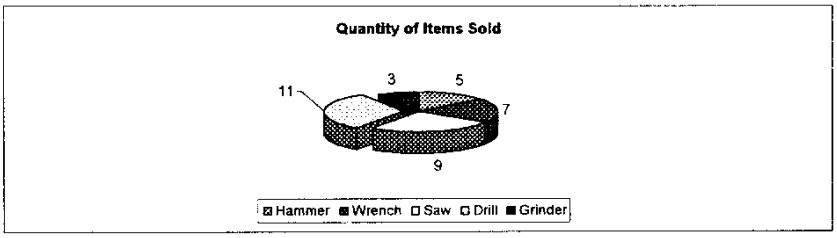
Dalley Hardware Sales

Item	Qty Sold	Cost	Sale Price	Margin	Gross
Hammer	5	3.5	7	=D4-C4	=E4*B4
Wrench	7	1.75	4.5	=D5-C5	=E5*B5
Saw	9	4.35	12	=D6-C6	=E6*B6
Drill	11	7.25	21	=D7-C7	=E7*B7
Grinder	3	21.35	49	=D8-C8	=E8*B8
				Total	=SUM(F4:F8)

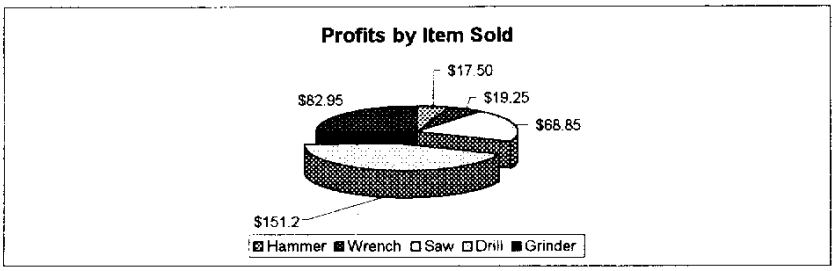
Cells A1:F1 merged with contents of A1 centered.

Content of A3:F3 centered in each cell, bolded, and underlined.
Cells C4:F8 formatted to currency style.

Autosum function used for F9.



Ranges A4:A8 and B4:B8 used for this 3D pie chart.



Ranges A4:A8 and F4:F8 used for this 3D pie chart.

Note: This is the formula view of your spreadsheet. To switch to this view, use the keystrokes <Cntrl>+<tilde>. The tilde key is the key to the immediate left of the one/question mark key on the keyboard.

CIS121

Introduction to Computer Information Systems

[illegible]

Slide One – Bulleted Text

- Bullet One
- Bullet Two
- Bullet Three
- Bullet Four

Bulleted Text

- Bullet One
- Bullet Two
  - Sub Bullet One
  - Sub Bullet Two
- Bullet Three

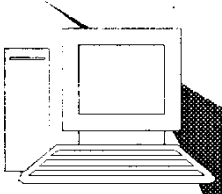
Two Column Text

- Left Bullet One
- Left Bullet Two
- Left Bullet Three

- Right Bullet One
  - Right Sub Bullet One
  - Right Sub Bullet Two
- Right Bullet Two
- Right Bullet Three

Text and Clip Art

- Text Bullet One
- Text Bullet Two
  - Sub Bullet One
  - Sub Bullet Two
- Text Bullet Three



Conclusion Slide

- Conclusion One
- Conclusion Two
- Conclusion Three

Note: This is an example of six slides created using different layouts you are required to submit for credit.

Note This is an example of the Address database table where you will be required to add your data.

Addresses

9/5/00

Address ID	First Name	Last Name	Address	City	State/Province	Postal Code	Country	Email Address
155	John	Smith	123 Main St	Yourtown	VA	22032-		
156	Bill	Jones	234 Olive St	Lakewood	WA	98300-		
157	Mary	Carter-Smythe	345 Bay St	Puyallup	WA	98400-		
158	Sue	Shoemaker	125 Mt. Ranier	Portland	OR	97500-		
159	Tom	Wright	687 Helens	Fairfax	VA	22030-		
160	Janice	Scott	9876 Georgia	Rockville	MD	20900-		
161	John	Doe	123 Maiun St	Tacom	WA	98300-		
162	Bill	Clinton	1600 Pennsylv	Washington	OR	98200-		

Last Name	First Name	City	State/Province	Postal Code
Carter-Smythe	Mary	Puyallup	WA	98400-
Clinton	Bill	Washington	OR	98200-
Doe	John	Tacom	WA	98300-
Jones	Bill	Lakewood	WA	98300-
Shoemaker	Sue	Portland	OR	97500-

Oregon and Washington Names Rep

StateOrProvince	Last Name	First Name	City	Postal Code
OR				
	Clinton	Bill	Washington	98200-
	Shoemaker	Sue	Portland	97500-
WA				
	Doe	John	Tacom	98300-
	Carter-Smythe	Mary	Puyallup	98400-
	Jones	Bill	Lakewood	98300-

Janice Scott
9876 Georgia
Rockville, MD 20900

Tom Wright
687 Helens
Fairfax, VA 22030

John Smith
123 Main St
Yourtown, VA 22032

Sue Shoemaker
125 Mt. Ranier Dr.
Portland, OR 97500

Bill Clinton
1600 Pennsylvania Ave
Washington, OR 98200

John Doe
123 Maiun St
Tacom, WA 98300

Bill Jones
234 Olive St
Lakewood, WA 98300

Mary Carter-Smythe
345 Bay St
Puyallup, WA 98400

Note: This page shows examples of the results of queries, a report based on a query and generated using a wizard, and a mailing label report.

QBASIC Reserved (Key) Words

Reserved (Key) Word	Description/Useage
CLS	Clears the screen
REM (or abbreviated as a single quote ')	Remark - computer does not execute, used to add notes, etc into source code for explanations, visual separation of different sections, modules, etc.
END	Terminates program execution
Input/Output	
INPUT *variablename*	Prints a "?" to the screen and waits for keyboard input for the variable
INPUT *"text"; variablename*	Prints the text inside the double quotes to the screen and a "?" and waits for keyboard input of variable. You must separate the "text" and variable name with punctuation, either a ";" or a ",". The semicolon places the "?" in the next position following the text. The period tabs the "?" 5 spaces to the right.
PRINT	Prints a blank line to screen
PRINT *"text"*	Prints the text inside the double quotes to the screen
PRINT TAB (xx) *"text"*	Tabs the start of printing "xx" spaces from the left margin of the screen and prints the text inside the double quotes to the screen
PRINT USING "$$##,###.##"; *variablename*	Used to format number input to the style indicated between the double quotes, in this case with a $ sign, comma at thousands, and 2 decimal places. You must separate the "format" and variable name with punctuation, a semicolon so the program will print the value of the variable indicated in the format indicated.
LPRINT	Same as PRINT only to a printer
LPRINT *"text"*	Same as PRINT "text" only to a printer
LPRINT TAB (xx) "*text*"	Same as PRINT TAB only to a printer
LPRINT USING "$$##,###.##"; variablename	Same as PRINT USING only to a printer
Loops and Decisions	
DO UNTIL *variable condition*	Starts a loop which executes until the variable condition is true, must use LOOP to return to DO UNTIL program line
DO WHILE *variable condition*	Starts a loop which executes while a variable condition is true, must use LOOP to return to DO WHILE program line
LOOP	Returns execution of a series of program lines to the beginning of a DO UNTIL or DO WHILE loop
IF *variable condition* **THEN** *statement* **ELSE** *statement*	Provides means to branch execution of program, trap errors, make decisions. If the variable condition is *true*, the *then* statement is executed, otherwise the *else* statement is executed. The *else* may be omitted if you want the program line following the IF-THEN to be executed. If a program line(s) follows the ELSE that is not simply a continuation of program execution but special actions you desire to be executed if the variable condition is false, you must use an END IF to mark the last line that would be executed if the variable condition is false.
Variable Types	
variablename	Default single precision number (calculated to 8 decimal places)
variablename!	Specifies single precision number
variablename#	Specifies double precision number (calculated to 16 decimal places)
variablename%	Specifies integer, no decimal places
variablename$	String, i.e. lables or names, a combination of letters and numbers

Note: variablenames must be continuous characters, no spaces allowed.

CIS121– QBASIC Lab Exercise Scenarios

Project 1: Write a QBASIC program using good structured programming techniques to convert Fahrenheit temperature values to Celsius temperature values. The program must include a loop to repetitively perform the conversion until the user inputs an ending criterion. The formula for conversion is:

Tempcel = (TempF - 32) / (9/5)

Project 2: Write a QBASIC program using good structured programming techniques to calculate the monthly payment on an installment loan. Provide the user with the ability to iteratively change the down payment, interest rate, and term of the loan in months. The interest rate needs to be inputted in decimal form, i.e. 6% = .06. The program must include a loop to repetitively perform the operation until the user inputs an ending criterion.

The formula to calculate the monthly payment is:

Mopay = Amtfin / ((1 - (1 + Intrate / 12) ^ -Term) / (Intrate / 12))

Example QBASIC Program
Line numbers are shown for reference only. They are NOT required nor are they to be typed when programming in Quick BASIC.

```
Line 1   REM*********************************
Line 2   REM**** Identification Section *****
Line 3   REM*********************************
Line 4   REM Programmer:  John Doe
Line 5   REM Date Written:  Feb 1999
Line 6   REM Program Name:  Number Multiplier
Line 7   ' Program Purpose - to create a number calculator
Line 8   ' Program Version:  1.20
Line 9   '***************************
Line 10  '***** Data Dictionary *****
Line 11  '***************************
Line 12  'Variable Name      Variable Type        Description
Line 13  'firstnum           number (inputted)    first number inputted
Line 14  'secondnum          number (inputted)    second number inputted
Line 15  'calcnum            number (derived)     the answer
Line 16  'yourname$          string (inputted)    user's name
Line 17  'finished$          string (inputted)    exit/program ending condition
Line 18  '*****************************
Line 19  '***** Procedure Section *****
Line 20  '*****************************
Line 21  CLS
Line 22  INPUT "Please type in your name and press ENTER.  "; yourname$
Line 23  PRINT
Line 24  PRINT "Hello, "; yourname$; ", I am here to help you with math."
Line 25  PRINT
Line 26  PRINT yourname$; ", you type in the numbers and I will do the work."
Line 27  PRINT "I am programmed to multiply two numbers for you."
Line 28  PRINT
Line 29  DO UNTIL finished$ = "Y" OR finished$ = "y"
Line 30       PRINT
Line 31       INPUT "What is your first number"; firstnum
Line 32       INPUT "What is your second number"; secondnum
Line 33       calcnum = firstnum * secondnum
Line 34       PRINT
Line 35       PRINT "The answer is:  "; calcnum
Line 36       INPUT "Are you finished multiplying (Y or y)"; finished$
Line 37       CLS
Line 38  LOOP
Line 39  PRINT
Line 40  PRINT "I hope I helped, "; yourname$; ", just run me whenever you need me."
Line 41  PRINT "As a computer, I don't get tired doing repetitive or boring things."
```

QBASIC Program Evaluation Rubric

Attribute	Emerging (5 points)	Competent (8 points)	Exemplary (10 points)
Program Properly Documented	Program poorly documented with only minimal identification elements, sparse variable dictionary.	Program partially documented with some identification elements missing and variable dictionary listing all variables but inconsistent on including types and descriptions.	Program fully documented at the beginning using REMARKS to identify the program name, programmer, date, version, short description, complete variable dictionary containing all variable names, variable types, and variable descriptions.
Effective Communication	Program provides minimal user interface instructions.	Program provides some user guidance and instruction use PRINT statements to provide guidance and implication of program function.	Program makes extensive use of PRINT statements to create the user interface to inform user in a logical, systematic, clear, and concise manner the program's function and procedures.
Iteration	Program provides iterative execution through implementation of a DO loop control structure but exit criteria and/or procedures flawed.	Program provides iterative execution through implementation of a DO loop control structure with clear exit criteria and procedures.	Program provides iterative execution through implementation of at least 2 DO loop control structures, one controlling overall execution and another providing error trapping with clear exit criteria and procedures.
Inputs	All required user inputs are prompted with minimal directions to the user.	All required user inputs are prompted with messages to the user controlled by the PRINT keyword followed by the INPUT keyword to capture the variable value.	All required user inputs are prompted with complete and unambiguous messages to the user displayed as literals controlled by the INPUT keywords and captured as variable values.
Outputs	All program outputs are minimally described or explained to the user on the screen with PRINT keyword controlled statements with the correct answer.	All program outputs are defined to the user on the screen with PRINT keyword controlled statements with the correct answer.	All program outputs are fully described and explained to the user on the screen with PRINT keyword controlled statements with the correct answer.

CIS 121
Student Name _____

Biosketch Format

Name:

Nationality:

Education:

Place of Birth:

Born: Died:

References:

What is their principle contribution to computers and information systems? Provide a brief explanation of the contribution, its significance, and how it was/is used/applied

Your Name

Mr. Claremont

Information Systems 105

October 15, 2001

Web Publishing

Before the advent of the World Wide Web, the means to share opinions and ideas with others easily and inexpensively was limited to classroom, work, or social environments. Generating an advertisement or publication required a lot of expense. Today, businesses and individuals can convey information to millions of people by using Web pages.

Web Publishing is the process of developing, maintaining, and posting Web pages. With the proper hardware and software, Web publishing is fairly easy to accomplish. For example, clip galleries offer a variety of images, videos, and sounds.[1] A sound card allows users to incorporate sounds into Web pages. With a microphone, a Web page can include voice. A digital camera provides a means to capture digital photographs. A scanner can convert existing photographs and other graphics into a digital format. A video capture card and a video camera can incorporate videos into Web pages. A video digitizer can capture still images from a video (Thrall and Winters 46-68).

HTML (hypertext markup language) is a set of special codes used to format a file for use as a Web page. These codes, called tags, specify how the text and other elements

[1] Many current software packages include a clip gallery. Clip galleries also are available on the Web or may be purchased on CD-ROM or DVD-ROM (Zack 9-24).

of the Web page display in a Web browser and where the links on the page lead. A Web browser translates the document with the HTML tags into a functional Web page.

Developing, or authoring, a Web page does not require the expertise of a computer programmer. Many word processing and other application software packages include Web page authoring features that assist in the development of basic Web pages. Microsoft Office 2000 products, for example, provide easy-to-use tools that enable users to create Web pages and incorporate items such as bullets, frames, backgrounds, lines, database tables, worksheets, and graphics into the Web pages (*Shelly Cashman Series® Microsoft Word 2000 Project 2).* Web page authoring software packages enable the development of more sophisticated Web pages that might include video, sound, animation, and other special effects. Both new and experienced user can create fascinating Web sites with Web page authoring software.

Works Cited

Shelly Cashman Series ® Microsoft Word 2000 Project 2. Course Technology. 1Oct. 2001. http://www.scsite.com/wd2000/pr2/wc1.htm.

Thrall, Peter D., and Amy P. Winters. *Computer Concepts for the New Millennium.* Boston: International Press, 2001.

Zack, Joseph R. "An Introduction to Clip Galleries and Digital Files." *Computers for Today, Tomorrow, and Beyond* Sep. 2001: 9-24.