This volume, one of a series of eight curriculum guides compiled by the Colorado Workplace Learning Initiative: 1991-92, includes five courses on functional skills for a workplace literacy curriculum. Introductory materials include a table of contents, a list of the curriculum topics covered in each guide, and a section called "Hello Computer" that outlines the objectives, timing, materials, and plan of a workshop on computer fundamentals. The five courses provided are: (1) introduction to computers for the workplace; (2) WordPerfect, Lotus for the workplace; (3) computer skills workshops—Microsoft Windows, Lotus; (4) safety in the workplace; and (5) conversational Spanish for the workplace. Each course contains information on some or all of the following: abstract; course objectives; time and materials; course/workshop/lesson plan; weekly schedule plan/workshop outline; benefits; course syllabus; addendum; notes and acknowledgements. (NLA)
Volume V: Functional Skills

Courses

Introduction to Computers for the Workplace
Wordperfect, Lotus for the Workplace
Computer Skills Workshops: Microsoft Windows, Lotus
Safety in the Workplace
Conversational Spanish for the Workplace
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The program is described on the attached abstract. Contained in this series of curriculum guides are the outlines and notes for the topics covered according to the basic skills needs of the business partners. For more information, contact Colorado Community College and Occupational Education System, 303-620-4000.

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5
HELLO

COMPUTER
HELLO COMPUTER!

OBJECTIVES
By the end of this workshop you will be able to:

* Explain the everyday uses of a computer
* Trace the evolution of computer development since the 1940's
* Explain the concept of IPOS
* Identify the components of the computer
* Start computer and select programs from the menu
* Understand how a computer functions and explain the following terms: program, data, commands, operating system, ROM
* Explain DOS and its functions
* Utilize DOS commands

TIMING
This workshop will be conducted in three four-hour sessions

MATERIALS

* A room equipped with computer terminals and printers, sufficient for at least 10 students
* Overhead projector
* Large screen for overhead projector
* Instructor's terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains the course material, using overhead projector or large CRT.
3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.

WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephone, voice mail, the microwave, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic understanding of computer systems and their applications.

Computers enable us to store large amounts of data and retrieve it quickly and easily. With a computer, we can analyze, display, and manipulate financial, numerical, and scientific data. In addition, we can store and edit written text. Computers definitely can make our personal and professional lives much more productive.

Not surprisingly, familiarity with computers is a big advantage in the job market since almost all businesses utilize computers. Individuals with a working knowledge of computers have a very definite advantage over those who do not. They have more opportunities for employment with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Hello Computer workshop will provide the student with the fundamentals necessary in such an age.
TABLE OF CONTENTS

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INTRODUCTION TO COMPUTERS

Abstract

Students involved in learning activities for the workplace will find that a knowledge of basic computer literacy is extremely useful and will prepare them for jobs that they will take in the business industry. Students involved in the workplace learning program will develop computer skills required for advancement in their present job or they will acquire additional skills to perform the function of their present assignments. The course is designed to provide the student with valuable experience and necessary lab practice in basic computer concepts. The content of this course will allow the student and the instructor to apply exercises to specific job requirements.
COURSE OBJECTIVES

At the completion of this course the student will be able to:

- Understand the primary components of a microcomputer system
- Demonstrate a basic understanding of keyboard and function keys
- Apply rules for handling and formatting diskettes
- Understand and apply DOS commands
- Demonstrate a basic knowledge of Lotus 1-2-3 and WordPerfect
- Apply all functions in the workplace
TIME AND MATERIALS

TIMING

The will be two meetings a week for eight weeks which will equal 40 hours of instruction.

Each class period will be divided into the following:

1. Presentation
2. Demonstration
3. Application
4. Evaluation

MATERIALS

Course syllabus
Paper and Pencil
DOS software
Two each 3.5 DS/DD floppy disks
COURSE PLAN

Daily Plan for Class

Introduction 5 minutes
Presentation (Instructor) 30 minutes
Demonstration (Instructor/Student) 65 minutes
Summary and Evaluation 20 minutes

TOTAL 120 MINUTES

Total Program Plan

Presentation (Instructor) 12 hours
Demonstration (Instructor/Student) 26 hours
Summary and Evaluation (Instructor) 2 hours

TOTAL 40 hours
Introduction to Personal Computers

Lesson #1: Chapter 1, Microcomputer Systems
Chapter 2, Getting Started With DOS

Lesson #2: Chapter 3, Command Syntax

Lesson #3: Chapter 4, Disks and Formatting

Lesson #4: Examination covering chapters 1-4
Chapter 5, Using Internal Commands

Lesson #5: Chapter 6, Expanding the Use of the Copy Command

Lesson #6: Chapter 7, File Maintenance

Lesson #7: Examination covering chapters 5-7
Introduction to Lotus
Introduction to WordPerfect

Lesson #8: Examination covering Lotus and WordPerfect
COURSE SYLLABUS

TITLE OF COURSE: Introduction to Computers
CONTACT HOURS: 26 Hours
PREREQUISITES: TABE Testing
RESOURCES NEEDED: PC/MS DOS Fundamentals
By Carolyn Z. Gillay
SUPPLIES: DOS software
2 each, 3.5" DS/DD floppy disks
COURSE GOAL: Have students demonstrate proficiency with DOS. Students will demonstrate knowledge of basic skills necessary to run Lotus 123 & WordPerfect 5.1.

COURSE OBJECTIVES:

► To demonstrate understanding of Computer Operation
► To demonstrate proficiency with DOS Commands
► To demonstrate proficiency with Wildcards
► To demonstrate proficiency with Copy Command
► To be able to create and print a document in Lotus 123 and WordPerfect

EVALUATION PROCEDURES:

There will be three examinations graded Pass/No Pass. There will be homework assignments graded Pass/No Pass (at least 70% correct). Determination of a grade of Pass/No Pass for the course will be based on attendance (10%), homework (40%), and examinations (50%).
LESSON PLAN

A. Course Name: Introduction to Computers

C. Topic: Orientation

D. Prerequisite: TABE Testing

E. Purpose: Inform students of basic format of course

F. Resources: Syllabus

B. Lecture Number: 1
LECTURE OUTLINE

A. Course Name: Introduction to Computers

B. Lecture Number: 1

I. Hand Out Sign in Sheets

II. Hand Out Syllabus

   A. Discuss syllabus

   B. Discuss text
LESSON PLAN

A. Course Name: Introduction to Computers

B. Lecture Number: 2

C. Topic: Chapter 1, Microcomputer Systems

D. Prerequisite: Unit 1

E. Purpose: Discuss elements that make up a microcomputer system and the role and use of the operating system.

F. Performance Objectives:

- Understand the parts of a microcomputer system
- Understand the CPU, RAM, and ROM
- Understand input devices and how they are used
- Understand output devices and how they are used
- Understand external storage devices, both floppy disks and hard disks
- Understand the difference between system software and application software
- Understand the function of an operating system

Activity: Page 23, review questions 1-15

G. Resources: None
LECTURE OUTLINE

A. Course Name: Introduction to Computers

B. Lecture Number: 2

I. Part I Introduce Basic Parts of Computer

A. Computer: An electronic device, operating under the control of instructions stored in its own memory unit that accepts input or data, processes data arithmetically and logically, produces output from the processing, and stores the results for future use.

1. Hardware and Software
2. Hardware
3. Input Output Processor Monitor
4. Disks 5.25 and 3.5
5. Hard disk

B. Word Processing: Enables you to use the computer to create documents

C. Spreadsheet: Reporting and decision making within organizations

D. Database: Store, organize, update, and retrieve data

E. OS: Collection of programs that provides an interface between you and the application program
LESSON PLAN

A. Course Name: Introduction to Computers
B. Lecture Number: 3

C. Topic: Chapter 2 (Getting Started with DOS)

D. Prerequisite: Unit 2

E. Purpose: Discuss booting the computer, using the keyboard, and making a system disk

F. Performance Objectives:
   - Be able to boot the system
   - Be able to reboot the system
   - Understand and be able to use the computer keyboard
   - Be able to make a copy of DOS system disk
   - Be able to compare the copy of DOS that you made with the original system disk
   - Be able to end a work session with the computer

Activity: Page 49, questions 1, 2, 7, 9, 10

F. Resources: None
LECTURE OUTLINE

A. Course Name: Introduction to Computers

B. Lecture Number: 3

II. Part 2 DOS: OS specific program

   A. Booting

   B. Default drive
      1. Dos prompt
      2. Dir/p/w
      3. cls
      4. globals and wildcards
LESSON PLAN

A. Course Name: Introduction to Computers  
B. Lecture Number: 4

C. Topic: Chapter 3 (Command Syntax)

D. Prerequisite: Unit 3

E. Purpose: Discuss command syntax, file names, defaults, parameters, using the DIR command with parameters, and wildcards

F. Performance Objectives:
   ▶ Be familiar with the DOS command structure
   ▶ Understand the purpose and use of DIR command
   ▶ Understand prompts
   ▶ Understand defaults
   ▶ Be able to change the default drive
   ▶ Understand wildcards and be able to use them with the DIR command.

Activity: Page 74, review questions 1-20

G. Resources: None
LECTURE OUTLINE

A. Course Name: Introduction to Computers
B. Lecture Number: 4

I. Command Syntax
II. Using Parameters
III. Using Parameters with the DIR Command
IV. Using File Names as Parameters
V. Using File Names as Parameters with the DIR Command
VI. Drives as Device Names and Defaults
VII. Using Defaults and Changing Defaults
VIII. Global File Specifications: Wildcards, the ? and the *
IX. DIR and Wildcards
X. Printing the Screen
LESSON PLAN

A. Course Name: Introduction to Computers

B. Lecture Number: 5

C. Topic: Chapter 4, Disks and Formatting

D. Prerequisite: Unit 4

E. Purpose: Discuss how DOS uses disks and how disks are prepared for use

F. Performance Objectives:
   - Understand the nature of disks
   - Understand internal and external commands
   - Understand the use of the FORMAT command
   - Be able to format a floppy disk
   - Be able to format a floppy disk with a system and a volume label
   - Understand the difference between bootable and nonbootable disks
   - Understand and use the VOL command

Activities: Page 92, review questions 1-20
            Page 93, activities 1 + 2

G. Resources: None
LECTURE OUTLINE

A. Course Name: Introduction to Computers
   B. Lecture Number: 5

I. Structure of a disk: Formatting a Disk
II. Formatting a Floppy Disk
III. Materials Needed
IV. Formatting a Disk
V. Understanding Internal/External Commands
VI. Formatting a Disk with a Volume Label
VII. Formatting a Disk with a Volume Label: Using the VOL Command
VIII. Bootable and Nonbootable Disks
IX. Trying to Boot with a Nonsystem Disk
X. Formatting a Data Disk with an Operating System
XI. Formatting a Disk with /S and /V
XII. Formatting a Data Disk with /S and /V
LESSON PLAN

A. Course Name: Introduction to Computers

B. Lecture Number: 6

C. Topic: Chapter 5, Using Internal Commands: Copy and Type

D. Prerequisite: Unit 4

E. Purpose: Discuss essential internal commands that help to manage and manipulate files on a disk

F. Performance Objectives:
   - Know the syntax of the COPY and TYPE commands
   - Be able to copy files on the same disk
   - Understand and be able to create dummy files
   - Be able to display text files with the TYPE commands
   - Understand and be able to use wildcards with the COPY command
   - Be able to copy text files to the printer

Activities: Page 116, True/False 1-10
            Page 116-117, Activities 1-10

G. Resources: Microcomputer, DOS system disk, and data disk
LECTURE-OUTLINE

A. Course Name: Introduction to Computers
   B. Lecture Number: 6

I. Managing your Files with Internal Commands
II. The Copy Command
III. Creating Text Files using the Copy Command
IV. Review of File-Naming Rules
V. The TYPE Command
VI. Dummy Files
VII. Making Additional Files on the Same Disk
VIII. Using Wildcards with the Copy Command
IX. Printing Files using the COPY Command
X. Printing Files using the COPY Command and Wildcards
LESSON PLAN

A. Course Name: Introduction to Computers
B. Lecture Number: 7

C. Topic: Chapter 6, Expanding the use of the COPY command

D. Prerequisite: Unit 6

E. Purpose: Discuss the COPY command, introduce the concept of a path, and reinforce the use of the DIR and TYPE commands

F. Performance Objectives:
   ▶ Be able to copy files to other disk drives
   ▶ Set up and use a subdirectory
   ▶ Understand the concept of overwriting files
   ▶ Be able to overwrite files
   ▶ Understand and be able to concentrate text files
   ▶ Be able to verify that a file has been copied properly

Activities: True/False questions, page 143 (1-10)
            Suggested Activities, page 143-144 (1-8)

G. Resources: Microcomputer, DOS System disk, data disk, activities disk
LECTURE OUTLINE

A. Course Name: Introduction to Computers
B. Lecture Number: 7

I. Copying Files to another Disk
II. A Brief Introduction to Subdirectories and Paths
III. How to Overwrite Files with the COPY Command
IV. Using Wildcards with the COPY Command to Copy Files to Different Drives
V. Combining Text Files with the COPY Command
VI. Understanding Verify when using the Copy Command
A. Course Name: Introduction to Computers
B. Lecture Number: 8

C. Topic: Chapter 7, File Maintenance: Using ERASE, DEL, and RENAME

D. Prerequisite: Unit 7

E. Purpose: Discuss essential internal commands that helps to manage and manipulate files on a disk. The major internal commands are DIR, COPY, TYPE, DEL, and RENAME. This unit focuses on the DEL and RENAME commands and also explains how to back up data files.

F. Performance Objectives:
   - Understand the major internal commands
   - Understand how to delete files
   - Understand how to rename files
   - Be able to backup data

Activities: True/False questions, 1-10 page 171
            Suggested activities, 1-10 page 172

G. Resources: DOS System Disk, activities disk, data disk, and a blank disk
LECTURE OUTLINE

A. Course Name: Introduction to Computers  

B. Lecture Number: 8

I. Getting Rid of Files with the ERASE and DEL Commands
II. Using Wildcards with the DEL Command
III. Using the ERASE/DEL Command on another Drive
IV. Changing the Names of Files with the RENAME Command
V. Using RENAME with Wildcards on the Same Drive
VI. Using RENAME on Different Drives
VII. Backing up the Data Disk
VIII. Backing up Files with the COPY Command
LESSON PLAN

A. Course Name: Introduction to Computers

B. Lecture Number 9

C. Topic: Project 1 [Shelly] typing, saving, and printing a simple letter

D. Prerequisite: Unit 8

E. Purpose: Have students become familiar with the basics of word processing.

F. Performance Objectives:
   - Load WordPerfect into main memory
   - Explain the function of the WordPerfect template
   - Move the cursor in all directions
   - View the reveal codes
   - Type, save and print a short letter
   - Exit WordPerfect and return to the DOS prompt

Activities: Student assignment 10
Student assignment 11

G. Resources: Data disk, WordPerfect program, microcomputer, and Learning to Use WordPerfect 5.0/5.1, Lotus 1-2-3, and dBase III Plus by Gary B. Shelly
LECTURE OUTLINE

A. Course Name: Introduction to Computers

B. Lecture Number 9

I. The Keyboard

II. The WordPerfect Template

III. Defaults

IV. Loading WordPerfect

V. The Screen

VI. The Help Function

VII. Creating a Document

VIII. Printing a Document

XI. Reveal Codes

X. Saving a Document

XI. Moving the Cursor on a Blank Screen

XII. Exiting WordPerfect
LESSON PLAN

A. Course Title: Introduction to Computers
B. Lecture Number 10

C. Topic: Spreadsheet Using Lotus 1-2-3, Building a Worksheet Project 1

D. Prerequisite: Unit 9

E. Purpose: Have students become familiar with the basic function of spreadsheets

F. Performance Objectives:
   - Begin Lotus 1-2-3
   - Describe the worksheet
   - Move the cell pointer around the worksheet
   - Save a worksheet
   - Print the screen image of the worksheet
   - Correct errors in a worksheet
   - Answer question regarding Lotus 1-2-3, using the on-line help facility
   - Quit Lotus 1-2-3

Activities: Student assignment 8
Student assignment 9

G. Resources: Data disk, WordPerfect program, microcomputer, and Learning to Use WordPerfect 5.0/5.1, Lotus 1-2-3, and dBase III Plus by Gary B. Shelly
LECTURE OUTLINE

A. Course Title: Introduction to Computers

B. Lecture Number 10

I. Starting Lotus 1-2-3
II. The Worksheet
III. Moving the Cell Pointer
IV. Entering Labels
V. Entering Numbers
VI. Moving the Cell Pointer
VII. Entering Formulas
VIII. Saving a Worksheet
IX. On-line Help Facility
XII. Quitting
ACKNOWLEDGEMENTS

Vera Lou Estrada, B.S., Director of Outreach Studies

Lupe Garcia, Administrative Clerk, Outreach Studies

Charlene Manzanares, Typist

Pueblo Community College Printshop

Esther Williams, Instructor of Business and Office Technologies
WORDPERFECT I
WORDPERFECT I

OBJECTIVES

By the end of this workshop you will be able to:

* Load and boot the system
* Identify and utilize the key functions and screen symbols
* Create, format, and edit a document
* Save, retrieve, and print a document

TIMING

This workshop will be conducted in four three-hour sessions.

MATERIALS

You will need:

* A room equipped with computer terminals and printers, sufficient for at least 10 students
* Overhead projector
* Large screen for overhead projector
* Instructor's terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Wordperfect functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assist individual students.

4. At the end of the workshop, instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephone, voice mail, the microwave, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic knowledge of computer systems and their applications.

Word processing (Wordperfect) enables us to store and edit written text. Before its development, editing literally involved the very tedious process of cutting and pasting. Using Wordperfect, we can easily copy, move, and delete text with just a few keystrokes. Wordperfect definitely can help us manipulate written text much more efficiently.

Not surprisingly, familiarity with Wordperfect is a big advantage in the job market since more and more businesses are utilizing some kind of word processing package. Individuals with a working knowledge of Wordperfect have a definite advantage over those who do not. They have more opportunities with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Wordperfect I workshop will provide the student with the fundamentals of a very widely used software package.
Community College of Denver

Course Content Guide

Microcomputer
Word Processors

CIS 120

- Prepared By -

D. Knauber
1.0 Introductory Word Processing

1.1 Creating documents

1.1.1 Loading system
1.1.2 Keyboard functions
1.1.3 Typing
1.1.4 Cursor movement
1.1.5 Formatting
1.1.6 Business formats

1.2 Editing documents

1.2.1 Correcting
1.2.2 Manipulating
1.2.3 Merging
1.2.4 Changing
1.2.5 Special effects

1.3 Filing

1.3.1 Naming
1.3.2 Saving
1.3.3 Retrieving

1.4 Printing

1.4.1 Print formatting
1.4.2 Making hard-copy

1.5 System Communication

1.5.1 Status and ruler line
1.5.2 Setting margins
1.5.3 Using tabs and decimal tabs

VI. Instructional Goals and Defined Outcomes

The following goals and outcomes are generic to each of the word processing classes. Each of the tutorial packages will achieve the outcomes in a way specific to each word processing system. All word processors meet the same four major goals; each does so in ways which are congruent with its own systems.

1.0 Introductory Word Processing
1.1 To create a document using the techniques learned in the word processing system.

The student will be able to:

1.1.1 Load and start-up (boot) the Word Processing System.
1.1.2 Understand the key functions and screen symbols needed to create a document.
1.1.3 Type a document into the computer.
1.1.4 Understand how to move around the screen.
1.1.5 Format a document.
   1.1.5.1 Insert tabs in a document.
   1.1.5.2 Place margins, headers or footers in a document.
1.1.6 Understand the types of formats usually employed in a business.
   1.1.6.1 Write a business letter.
   1.1.6.2 Write a standard memo.

1.2 To edit a document using the techniques learned in a Word Processing system.

The student will be able to:

1.2.1 Correct the document using the insertion and deletion capabilities of the Word Processor.
1.2.2 Manipulate the text by moving parts or pages of the documents.
1.2.3 Merge documents or parts of them to create new documents.
1.2.4 Change the document by employing the search and replace capabilities.
1.2.5 Employ the special characters to create italics, underlining, boldface, etc.

1.3 To file (save) the document using the techniques learned in the Word Processing System.

The student will be able to:

1.3.1 Name a document.
1.3.2 File (save) the document for future use.
1.3.3 Call-up (retrieve) the document using the computer's extended memory functions.

1.4 To print (make a hard-copy) of a document using the techniques of the Word Processing system.

The student will be able to:

1.4.1 Format a document for printing.
1.4.2 Interface the computer system with a printer to produce a hard (printed) copy.
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<td>D. Knauber</td>
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1.5  To demonstrate and direct the student to set margins and tabs through the use of the menus and the various command keys.

The student will be able to:

1.5.1 Identify and use the status line for editing purposes.
1.5.2 Set various margins for documents to be processed.
1.5.3 Set indent and decimal tabs for documents to be processed.
WORDPERFECT II
WORDPERFECT II

OBJECTIVES

By the end of this workshop you will be able to:

* Use the printer utilizing the alternate and standard pitch and special print effects
* Edit text through the use of the command and function keys
* Operate the software program via the opening menu
* Perform text editing and more complex inputing and formatting operations

TIMING

This workshop will be conducted in four three-hour sessions

MATERIALS

* A room equipped with computer terminals and printers, sufficient for at least 10 students
* Overhead projector
* Large screen for overhead projector
* Instructor's terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Wordperfect functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephone, voice mail, the microwave, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic knowledge of computer systems and their applications.

Wordprocessing (Wordperfect) enables us to store and edit written text. Especially helpful is the display pitch feature. With just a few keystrokes, we can alter the amount of space (in width) that one character occupies on the screen. An example of a situation where we may want to set the display pitch is in a document with three columns. In this situation, we can increase the display pitch measurement to display columns closer together on the screen. This feature enables us to customize our documents and create formats to suit our needs. Wordperfect definitely can help us manipulate written text much more efficiently.

Not surprisingly, familiarity with Wordperfect is a big advantage in the job market since more and more businesses are utilizing some kind of word processing package. Individuals with a working knowledge of Wordperfect have a definite advantage over those who do not. They have more opportunities with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Wordperfect II workshop builds on the knowledge acquired in the first session and introduces the student to more advanced applications.
WORDPERFECT III
WORDPERFECT III

OBJECTIVES

By the end of this workshop you will be able to:

* Create and edit keystroke macros
* Utilize desktop publishing features (line draw, font/type change, graphics)

TIMING

This workshop will be conducted in four three-hour sessions.

MATERIALS

* A room equipped with computer terminals and printers, sufficient for at least 10 students
* Overhead projector
* Large screen for overhead projector
* Instructor’s terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Wordperfect functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephone, voice mail, the microwave, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic knowledge of computer systems and their applications.

Wordprocessing (Wordperfect) enables us to store and edit written text. Especially helpful is the macro feature. Similar to the redial feature on a telephone, the macro feature records keystrokes and plays them back exactly as they were pressed. For example, one may need to format a document several times a day. Instead of repeating all the keystrokes manually, one can define (record) a macro to perform the task automatically. Wordperfect can definitely save us time and effort.

Not surprisingly, familiarity with Wordperfect is a big advantage in the job market since more and more businesses are utilizing some kind of word processing package. Individuals with a working knowledge of Wordperfect have a definite advantage over those who do not. They have more opportunities with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Wordperfect III workshop builds on the knowledge acquired in the first two sessions and introduces the student to more advanced applications.
LOTUS I
LOTUS I

OBJECTIVES

By the end of this workshop you will be able to:

* Build a spreadsheet by moving within, entering labels and numbers, employing formulas, copying data, and formatting

* Edit a spreadsheet by correcting mistakes, changing column width, inserting and deleting rows, and employing windowing techniques

* Save, name, and retrieve the spreadsheet

* Make a hardcopy of the spreadsheet

TIMING.

This workshop will be conducted in four three-hour sessions

MATERIALS

* A room equipped with computer terminals and printers, sufficient for at least 10 students

* Overhead projector

* Large screen for overhead projector

* Instructor's terminal connected to a large CRT

* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Lotus functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephone, voice mail, the microwave, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic knowledge of computer systems and their applications.

The electronic spreadsheet (Lotus) enables us to store and easily manipulate financial and numerical data. For example, often it is necessary to accumulate long columns of numbers and calculate the total. Before the development of the spreadsheet, all the data had to be manually re-calculated every time new data was entered. With Lotus, the whole list of numbers can be re-calculated automatically by building formulas into the spreadsheet. Lotus definitely can help us perform tasks much more efficiently.

Not surprisingly, familiarity with Lotus is a big advantage in the job market since more and more businesses are utilizing spreadsheets. Individuals with a working knowledge of Lotus have a definite advantage over those who do not. They have more opportunities for employment with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Lotus I workshop will provide the student with the fundamentals of a very widely used software package.
LOTUS II
LOTUS II

OBJECTIVES

By the end of this workshop you will be able to:

* Utilize graph commands to set axis, establish titles, create legends, and select types
* Print graphs utilizing spreadsheet graph printing functions
* Create and edit a data base
* Organize and sort the information in the data base to meet varied conditions
* Create, name, and use macros

TIMING

This workshop will be conducted in four three-hour sessions

MATERIALS

* A room equipped with computer terminals and printers, sufficient for at least 10 students
* Overhead projector
* Large screen for overhead projector
* Instructor's terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Lotus functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephones, voice mail, microwaves, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic understanding of computer systems and their applications.

The electronic spreadsheet (Lotus) enables us to store and easily manipulate financial and numerical data. For example, often it is necessary to accumulate long columns of numbers and calculate the total. Before the development of the spreadsheet, all the data had to be manually re-calculated every time new data was entered. With Lotus, the whole list of numbers can be re-calculated automatically by building formulas into the spreadsheet.

Lotus also enables us to create graphs directly from data in the spreadsheet. Before the development of Lotus, it took a great deal of time and effort to collect all the data and manually plot it on a graph. Using Lotus, we can create graphs within a matter of minutes with just a few keystrokes. Lotus definitely can help us perform tasks much more efficiently.

Not surprisingly, familiarity with Lotus is a big advantage in the job market since more and more businesses are utilizing spreadsheets. Individuals with a working knowledge of Lotus have a very definite advantage over those who do not. They have more opportunities for employment with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Lotus II workshop builds on the knowledge acquired in the first session and introduces the student to more advanced applications.
LOTUS III

OBJECTIVES

By the end of the workshop you will be able to:

* Create advanced macros
* Perform tasks using IF-THEN-ELSE structures
* Branch to other macros
* Create, edit, and change a menu

TIMING

This workshop will be conducted in four three-hour sessions.

MATERIALS

You will need:

* A room equipped with computer terminals and printers, sufficient for at least 10 students.
* Overhead projector
* Large screen for overhead projector
* Instructor's terminal connected to a large CRT
* Student manuals

PLAN FOR WORKSHOP

1. Instructor introduces the objectives of the workshop. Assists students in logging onto computers.

2. Instructor explains Lotus functions, using overhead projector or large CRT.

3. Instructor guides the students as they perform the steps, circulating around the classroom to answer any questions and assisting individual students.

4. At the end of the workshop, the instructor summarizes the functions covered, using the overhead projector.
WORKSHOP NOTES

Why study computers? As people who are living in the "Age of the Computer," it is essential that we are computer literate. Computers impact every aspect of our daily lives. Bank cards, supermarket scanners, traffic lights, telephones, voice mail, microwaves, and automobiles all utilize computer technology. Therefore, it is crucial that we acquire a basic understanding of computer systems and their applications.

The electronic spreadsheet (Lotus) enables us to store and easily manipulate financial and numerical data. For example, often it is necessary to accumulate long columns of numbers and calculate the total. Before the development of the spreadsheet, all the data had to be manually re-calculated every time new data was entered. With Lotus, the whole list of numbers can be re-calculated automatically by building formulas into the spreadsheet. Lotus definitely can help us perform tasks much more efficiently.

Lotus also enables us to do forecasting and projections. Before the development of Lotus, it took a great deal of time and effort to collect all the data and run projections on many different combinations of variables. With Lotus, we can create macros and perform IF-THEN-ELSE structures, enabling us to do complex projections within a matter of minutes. Lotus definitely can help us perform tasks much more efficiently.

Not surprisingly, familiarity with Lotus is a big advantage in the job market since more and more businesses are utilizing spreadsheets. Individuals with a working knowledge of Lotus have a very definite advantage over those who do not. They have more opportunities for employment with higher pay.

Without a doubt, computer literacy is a must for anyone living in the "Computer Age." The Lotus III workshop builds on the knowledge acquired in the first two sessions and introduces the student to more advanced applications.
MICROSOFT WINDOWS WORKSHOP

PUEBLO COMMUNITY COLLEGE
M. EVANS
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MICROSOFT WINDOWS 3.0

Abstract

The Microsoft Windows 3.0 workshop is designed to provide the student an opportunity to master the very basics of Microsoft Windows 3.0. With this the student will be able to go to their home or workplace and use Microsoft Windows.

At home it will help the students manage their schedule, balance their checkbooks, and keep records.

At work it will help the students become more valuable employees by allowing them to demonstrate the ease with which they can use Microsoft Windows.
OBJECTIVES

MICROSOFT WINDOWS 3.0

At the completion of this course, the student should be able to:

► Load Windows from DOS.
► Recognize menu bars and dialogue boxes.
► Interact with menus.
► Use help menus.
► Exit Windows
► Run and exit Windows applications
► Work with multiple applications
► Minimize and maximize Windows
► Change the size and position of windows and icons
► Use Clock
► Use the Calculator
► Use the Calendar
► Use the Cardfile
► Use the Notepad
► Use the Paintbrush
► Use Windows Write
TIME AND MATERIALS

Timing

Microsoft Windows 3.0 will meet two times a week for two hours each session for a total of four hours of instruction. This course will be conducted in a workshop format.

Each session will consist of the following:

1. Presentation 25 Minutes
2. Work on Computers 95 Minutes

TOTAL 120 Minutes

Materials

WORKSHOP PLAN

Daily Plan for Class

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<th>Activity</th>
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<tbody>
<tr>
<td>Presentation</td>
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<tr>
<td>Work on Computers</td>
<td>95 Minutes</td>
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TOTAL: 120 Minutes

Total Program Plan

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<td>Presentation</td>
<td>50 Minutes</td>
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<tr>
<td>Work on Computers</td>
<td>190 Minutes</td>
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TOTAL: 240 Minutes
WORKSHOP OUTLINE

MICROSOFT WINDOWS 3.0

At the end of this course the student should demonstrate basic proficiency with Microsoft Windows 3.0.

Session I

A. Demonstrate the ability to start Microsoft Windows 3.0 from DOS and exit Microsoft Windows 3.0.

B. Demonstrate the ability to identify and understand the various aspects of the Windows screen.

Session II

A. Demonstrate the ability to work with windows and icons.

B. Demonstrate an understanding of the various accessory programs.
BENEFITS OF MICROSOFT WINDOWS

- Increased efficiency in the workplace.
- Confidence in dealing with computers.
- Increased organization at home.
- Problem solving skills involving computers.
WORKSHOP SYLLABUS
<table>
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<tr>
<th>TITLE OF WORKSHOP</th>
<th>Introduction to Microsoft Windows 3.0</th>
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</table>
WORKSHOP SYLLABUS

1. TITLE OF COURSE: Microsoft Windows 3.0

2. PREREQUISITE: None

3. RESOURCES NEEDED:
   SUPPLIES: None

4. COURSE GOAL: The student will develop and demonstrate proficiency in the use and customization of Windows 3.0.

5. COURSE OBJECTIVES: At the completion of this workshop, the student should be able to:

   A. Demonstrate an understanding of Program Manager. Perform all the functions necessary to start Windows, interact with dialogue boxes and menus, and use the help menus.

      1. Load Windows from DOS.
      2. Recognize menu bars and dialogue boxes.
      3. Interact with menus.
      4. Use help menus.
      5. Exit Windows

   B. Perform all the functions necessary to customize a display, navigate from one display to another, and run accessories.

      1. Run and exit Windows applications
      2. Work with multiple applications
      3. Minimize and maximize Windows
      4. Change the size and position of windows and icons
      5. Use Clock
      6. Use the Calculator
      7. Use the Calendar
      8. Use the Cardfile
      9. Use the Notepad
     10. Use the Paintbrush
     11. Use Windows Write
LESSON PLAN

A. Course: Microsoft Windows 3.0

B. Topic: Learning About Windows

C. Prerequisite: None

D. Purpose: Start, Interact with, and Exit Windows

E. Performance Objectives: The student will demonstrate the ability to start Windows from DOS, understand the Windows screen, communicate with windows, get help, and exit windows.

1. Activity: The student will start Windows from DOS, identify parts of the Windows screen, navigate the menus, get help using help menus, and exit windows.

2. Conditions: Classroom

3. Standards: Instructor will observe each student as he or she goes through the various steps outlined above. They will be tried and retried until each student completes each step with 100% accuracy.

F. (Equipment, Materials, Resources Required)

<table>
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LECTURE OUTLINE

A. Course Name: Microsoft Windows
B. Lecture Number: 1

I. Introducing Windows 3.0
   A. Windows replaces the DOS interface
   B. Windows and your application programs
   C. Windows allows you to share data
   D. What you need to run windows
   E. Starting windows
   F. The windows screen
   G. The desktop
   H. Icons
   I. Title bar
   J. Minimize and maximize buttons
   K. The control box

II. Communicating with Windows
   A. Using the mouse and the keyboard
   B. Working with the control box
   C. How to scroll windows
   D. Working with dialogue boxes
   E. Getting help
   F. Ending your windows session
   G. Saving your windows setup
   H. Exiting windows from program manager
   I. Exiting windows from an application
LESSON PLAN

A. Course: Microsoft Windows 3.0

B. Lesson 2

B. Topic: Working with Windows and Its Accessories

C. Prerequisite: Completion of Lesson 1

D. Purpose: Interact with Windows

E. Performance Objectives:
   The student will demonstrate the ability to run and exit applications, work with multiple windows, minimize and maximize windows, change size and position of windows and icons, and utilize accessories.

1. Activity:
   The student will run and exit windows applications, work with multiple windows applications, maximize and minimize windows applications, change the size and position of windows and icons, and demonstrate an understanding of the use of the windows accessories.

2. Conditions: Classroom

3. Standards: Instructor will observe each student as he or she goes through the various steps outlined above. They will be tried and retried until each student completes each step with 100% accuracy.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Name: Microsoft Windows
B. Lecture Number: 2

I. Running and Exiting Windows Applications
   A. To run a program from an icon
   B. Closing a window
   C. Opening an application from icon group
   D. Working with multiple windows applications
   E. Using the task list
   F. Closing multiple windows
   G. Minimizing and maximizing Windows
   H. Maximizing an open window
   I. Reducing applications to icons
   J. Expanding an icon to a window

II. Minimizing program manager automatically
    A. Changing the size and position of windows and icons
    B. Arranging icons on the desktop

III. Introducing desktop accessories and utilities
     A. How to access the accessories group
     B. The games group
     C. Starting accessories automatically
     D. Using windows clock
     E. Using windows calculator
     F. Using the standard calculator
     G. The scientific calculator
     H. Managing your schedule with windows calendar
     I. How to create a calendar
     J. Managing data with windows cardfile
     K. How to create a card file
     L. Making notes with windows notepad
     M. How to start notepad
     N. How to edit text
     O. Creating graphics with windows paintbrush
     P. Starting paintbrush
     Q. How to use the tools
     R. Word processing with windows write
     S. How to type a document
     T. The control box
     U. Expanding an icon to a window
     V. Minimizing program manager automatically
LOTUS 1-2-3 WORKSHOP

PUEBLO COMMUNITY COLLEGE
M. EVANS
PUEBLO COMMUNITY COLLEGE
COURSE SYLLABUS

TITLE OF COURSE
Lotus 1-2-3 Introduction/Intermediate

PREFIX/NUMBER
Workplace Literacy Lotus

INSTRUCTOR

DAYS/TIME

BUILDING/ROOM

INSTRUCTOR OFFICE

HOURS

M
T
W
R
F
COURSE SYLLABUS

1. TITLE OF COURSE: Lotus 1-2-3 Introduction/Intermediate

2. PREREQUISITES: Introduction to COMPUTERS

3. RESOURCES NEEDED:
   TEXT: Microcomputing Lab’s by McGRAW-HILL
   SUPPLIES: DISKETTE

4. COURSE GOAL: The student will develop and demonstrate proficiency in creating and printing of a basic spreadsheet, managing large spreadsheets, creating and printing graphs, and creating templates and macros utilizing Lotus 1-2-3.

5. COURSE OBJECTIVES: At the completion of this course, the student should be able to:

   A. Perform all of the functions associated with creating a basic spreadsheet as follows:

      1. Move around the worksheet
      2. Enter/Edit labels, values, formulas
      3. Edit worksheet entries
      4. Use the main menu, the help system, and UNDO feature
      5. Save a worksheet file
      6. Print a file
      7. Copy and erase cell contents
      8. Highlight and copy a range
      9. Change column widths
     10. Set cell display format
     11. Insert and delete rows and columns
     12. Save and replace a file

   B. Perform all of the functions associated with managing a large spreadsheet as follows:

      1. Correct a circular reference
      2. Freeze row and column titles
      3. Create and use windows
      4. Set window synchronization
      5. Perform what-if analysis
      6. Use an absolute cell reference
      7. Extract worksheet data
      8. Link worksheet data
      9. Enter, the system date
     10. Justify text
     11. Use compressed printing
C. Perform all of the functions associated with creating and printing graphs as follows:

1. Use the access system
2. Create a line graph
3. Specify the X axis labels
4. Specify data to be graphed
5. Enter graph titles
6. Enter legends
7. Name and save the graph
8. Create a bar and stacked-bar graph
9. Create a pie chart
10. Shade and explode the pie chart
11. Print a graph

D. Perform all of the functions associated with creating and printing templates and macros as follows:

1. Name a range
2. Use an @IF function
3. Create a template
4. Create an interactive macro
5. Debug a macro
6. Use a repetition factor
7. Document a macro
8. Use the Learn feature
9. Protect worksheet cells
10. Create an autoexecute macro

6. EVALUATION PROCEDURES:

Pretest will be administered at the beginning of course to determine level of understanding a student has of spreadsheets.

The student will demonstrate his/her knowledge and ability of all functions covered in each chapter by completing weekly assigned practice exercises.

The student will demonstrate knowledge and ability in each area of the Lotus 1-2-3 function skills by passing a proficiency test with 70% accuracy or above on an instructor-developed assessment. The first test will cover functions covered in chapters 3, 4, and 5.
COURSE OUTLINE

I. Creating A Worksheet-Part 1 / Introduction to Lotus
   A. Examining the worksheet
   B. Moving around the worksheet
   C. Using the function keys
   D. The Undo feature
   E. The 1-2-3 menus
   F. The Help system
   G. Retrieving a file
   H. Recalculating the worksheet
   I. Saving and Printing the worksheet

II. Creating A Worksheet-Part 2 / Introduction to Lotus
   A. The Copy command
   B. Highlighting a Range
   C. Copying formulas
   D. Entering and @ function
   E. The Erase command
   F. Changing column widths
   G. Formatting a value
   H. Inserting rows
   I. Using the repeat label
   J. Inserting columns
   K. Saving and replacing files

III. Managing A Large Worksheet / Intermediate Lotus
   A. Locating and Correcting a Circular Reference
   B. Creating and Scrolling windows
   C. Displaying a Percent
   D. Using What-if Analysis
   E. Displaying a Percent
   F. Absolute Cell Reference
   G. Extracting Worksheet Data
   H. File Linking
   I. Entering the System Data
   J. Justifying Text
   K. Using Compressed Printing

IV. Creating and Printing Graphs / Intermediate Lotus
   A. The Access system
   B. The Type of graph
   C. Labeling the X-axis
   D. Specifying the data to be graphed
   E. Viewing the graph
   F. Entering graph titles
V. Creating and Printing Graphs / Intermediate Lotus
   A. Naming
   B. Saving for printing
   C. Switching type
   D. Resetting specifications
   E. Defining multiple data ranges
   F. Legends
   G. Creating a stacked Bar graph
   H. Creating a Pie chart
   I. Exploding a slice of the pie
   J. Printing a graph

VI. Creating Templates and Macros / Intermediate Lotus
   A. Naming a range
   B. Using the @ IF function
   C. Creating a template
   D. Creating an Interactive Macro
   E. Using repetitive factor
   F. Documenting the Macro
   G. The Learn feature
   H. Protecting cells
   I. Creating an Auto execute Macro

VII. The Company Worksheet / Intermediate Lotus
    A. How to get started
    B. Planning your spreadsheet
    C. Modifying your spreadsheet
    D. Creating a graph

VIII. The Company Spreadsheet / Intermediate Lotus
    A. Creating a spreadsheet
    B. Managing a large spreadsheet
LESSON PLAN

A. Course: Lotus 1-2-3

B. Topic: Creating a Worksheet Part 1 / Introduction to Lotus

C. Prerequisite: Introduction to Computers

D. Purpose: Creating a Spreadsheet

E. Performance Objective: The student will demonstrate the ability to recognize elements of a worksheet and move around the worksheet to enter/edit labels, values, and formulas.

1. Activity: The student will complete a lab exercise relative to identifying elements of worksheet, moving around worksheet, and entering and editing data with instructor's assistance.

2. Condition: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 1

I. Creating a Worksheet (Part 1) / Introduction to Lotus
   A. Examining the Worksheet
   B. Moving around the Worksheet
   C. Using the Function Keys
      1. Identify function of each key
      2. Entering/editing labels, values and formulas
LESSON PLAN

A. Course Title: Lotus 1-2-3
B. Lesson Plan 2

B. Topic: Creating a Worksheet (Part 1) / Introduction to Lotus

C. Prerequisite: Lesson 1

D. Purpose: To learn function keys relative to creating a spreadsheet

E. Performance Objective: The student will demonstrate the ability to use the main menu, use the help system, use the undo feature, save and print a worksheet file.

1. Activities:
   a. The student will complete the lab exercise relative to the use of the main menu, the use of the help system, use of the undo feature and save and print a worksheet file with instructor's assistance.
   b. The student will complete Chapter 1's practice exercises 3, 4 & 5, as homework assignments before next scheduled class period.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 2

I. Creating a Worksheet (Part 1) / Introduction to Lotus
   A. Using the Undo feature
   B. Using the 1-2-3 Menus
   C. Using the Help System
   D. Retrieving a File
   E. Recalculating the Worksheet
   F. Saving and Printing a Worksheet
LESSON PLAN

A. Course Title: Lotus 1-2-3

B. Lesson Plan 3

B. Topic: Creating a Worksheet (Part 2) / Introduction to Lotus

C. Prerequisite: Lesson 2

D. Purpose: To learn function keys relative to creating a spreadsheet

E. Performance Objective: The student will demonstrate the ability to use the Copy command, Highlighting a range, copying formulas, entering on @ function, and using the erase command.

1. Activity: The student will complete exercises relative to the use of the copy command, highlighting a range, copying formulas, entering on @ function and using the erase command with instructor's assistance.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 3

I. Creating a Worksheet (Part 2) / Introduction to Lotus
   A. Using the Copy Command
   B. Highlighting a Range
   C. Copying Formulas
   D. Entering on @ Function
      1. @ Sum
      2. @ Average
   E. Using the Erase Command
A. Course Title: Lotus 1-2-3

B. Lesson Plan 4

B. Topic: Creating a worksheet (Part 2) / Introduction to Lotus

C. Prerequisite: Lesson 3

D. Purpose: To learn function keys and commands relative to creating a spreadsheet

E. Performance Objective: The student will demonstrate the ability to change column widths, formatting a value, inserting rows, using the repeat label prefix character, inserting columns and saving and replacing a file.

1. Activities:
   a. The student will complete the lab exercises relative to the use of changing column widths, formatting a value, inserting rows, using the repeat label prefix character, inserting columns, and saving and replacing a file with instructor's assistance.
   b. The student will complete the Chapter 2 practice exercises 2, 3, & 4, as homework assignments before next scheduled class period.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 4

I. Creating a Worksheet (Part 1) / Introduction to Lotus
   A. Changing Column Widths
      1. Single cell
      2. Globally
   B. Formatting a Value
      1. Single cell
      2. Globally
   C. Inserting Rows
   D. Using the Repeat Label Prefix Character
   E. Inserting Columns
   F. Saving and Replacing a File
LESSON PLAN

A. Course Title: Lotus 1-2-3   B. Lesson Plan 5

B. Topic: Managing a Large Worksheet / Intermediate Lotus

C. Prerequisite: Lesson 4

D. Purpose: To learn function keys and commands relative to managing a large worksheet

E. Performance Objective: The student will demonstrate the ability to correct a circular reference, freeze row and column titles, create and use windows, set windows synchronization displaying a percent and performing a what-if analysis.

1. Activity: The student will complete the lab exercise relative to the use of locating and correcting a circular reference, creating and scrolling windows displaying a percent and using what-if analysis with instructor’s assistance.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3  
B. Lecture Number: 5

I. Managing a Large Worksheet / Intermediate Lotus  
   A. Locating and Correcting a Circular Reference  
      1. Work Status Command  
      2. Work Titles Command  
         a. Vertical  
         b. Horizontal  
         c. Clear  
         d. Both  
   B. Creating and Scrolling Windows  
      1. Worksheet Windows Command  
      2. Vertical  
      3. Unsyncronized  
      4. Clear  
   C. Displaying a Percent  
   D. Using What-if Analysis  
   E. Displaying a Percent
LESSON PLAN

A. Course Title: Lotus 1-2-3

B. Topic: Managing a Large Worksheet / Intermediate Lotus

C. Prerequisite: Lesson 5

D. Purpose: To learn function keys and commands relative to managing a large worksheet

E. Performance Objective: The student will demonstrate the ability to use an absolute cell reference, extract worksheet data, link worksheet data, enter the system date, justify text and use compressed printing.

1. Activities:
   a. The student will complete the lab exercise relative to the use of an absolute cell reference, extract worksheet data, link worksheet data, enter the system date, justify text and use compressed printing with instructor’s assistance.
   
   b. The student will complete Chapter 3’s practice exercises 2 and 4 as homework assignments before next scheduled class.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 6

I. Managing a Large Worksheet / Intermediate Lotus
   A. Using an Absolute Reference
      1. (F4) Absolute cell reference function key
      2. Absolute cell reference
      3. Mixed cell reference
   B. Extracting Worksheet Data
   C. File Linking
      1. Target file
      2. Source file
   D. Entering the System Data
      1. @ Now function
      2. Range format date command
   E. Justifying text
   F. Using Compressed Printing
LESSON PLAN

A. Course Title: Lotus 1-2-3

B. Lesson Plan 7

B. Topic: Creating and Printing Graphs / Intermediate Lotus

C. Prerequisite: Lesson 6

D. Purpose: To learn function keys and commands relative to creating and printing graphs

E. Performance Objective: The student will demonstrate the ability to use the access system, create a line graph, specify the x-axis labels, specify data to be graphed and enter graph titles.

1. Activity: The student will complete the lab exercises relative to the use of the access system, create a line graph, specify the x-axis labels, specify data to be graphed and enter graph titles with instructor’s assistance.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 7

I. Creating and Printing Graphs / Intermediate Lotus
   A. Using the Access System Creating and Printing Graphs
   B. Selecting the Type of Graph
   C. Labeling the X axis
   D. Specifying the Data to be Graphed
   E. Viewing the Graph
   F. Entering Graph Titles
A. Course Title: Lotus 1-2-3

B. Topic: Creating and Printing Graphs / Intermediate Lotus

C. Prerequisite: Lesson 7

D. Purpose: To learn function keys and commands relative to creating and printing graphs

E. Performance Objective: The student will demonstrate the ability to enter legends, name and save the graph, create a bar and stacked bar graphs, create a pie chart, shade and explode the pie chart, and print a graph.

1. Activities:
   a. The student will complete the lab exercise relative to the entering legends, naming and saving a pie chart, shading and exploding the pie chart, and printing a graph with instructor assistance.
   b. The student will complete chapter’s practice exercises 2 and 4 as homework assignments before next scheduled class.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 8

I. Creating and Printing Graphs / Intermediate Lotus
   A. Naming the Graph Settings
   B. Saving Graphs for Printing
   C. Switching the Graph Type
   D. Resetting Graph Specifications
   E. Defining Multiple Data Ranges
   F. Entering Legends
   G. Creating a Stacked-Bar Graph
   H. Creating a Pie Chart
   I. Exploding a Slice of the Pie
   J. Printing a Graph
A. Course Title: Lotus 1-2-3

B. Lesson Plan 9

B. Topic: Creating Templates and Macros / Intermediate Lotus

C. Prerequisite: Lesson 8

D. Purpose: To learn function keys and commands relative to creating templates and macros

E. Performance Objective: The student will demonstrate the ability to name a range use and @IF function create a template, create an interactive macro, and debug a macro.

1. Activities:
   a. The student will complete the lab exercise relative to naming a range, using an @IF function, creating a macro with instructor's assistance
   b. The student will complete Chapter 5's practice exercises 1 and 2 as homework assignments before next scheduled class

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 9

I. Creating Templates and Macros / Intermediate Lotus
   A. Naming a Range
   B. Using the @IF Function
   C. Creating a Template
   D. Creating an Interactive Macro
      1. Planning
      2. Entering
      3. Naming
      4. Testing
      5. Editing
A. Course Title: Lotus 1-2-3

B. Topic: Creating Templates and Macros / Intermediate Lotus

C. Prerequisite: Lesson 9

D. Purpose: To learn function keys and commands relative to creating templates and macros

E. Performance Objective: The student will demonstrate the ability to use a repetition factor document a macro, use the learn feature, protect worksheet cells, and create an auto executing macro.

1. Activities:
   a. The student will complete the lab exercise relative to using a repetition factor, documenting Macro, using the learn feature, protecting worksheet cells, and creating an auto executing Macro with instructor assistance.
   b. The student will complete chapter 5's practice exercises 1 and 2 as homework assignments before next scheduled class.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 10

I. Creating Templates and Macros / Intermediate Lotus
   A. Using Repetitive Factor
   B. Documenting the Macro
   C. Using the Learn Feature
   D. Protecting Cells
   E. Creating an Autoexecute Macro
A. Course Title: Lotus 1-2-3
B. Lesson Plan 11

B. Topic: Company Worksheets / Intermediate Lotus

C. Prerequisite: Lesson 10

D. Purpose: To create a spreadsheet that a student can utilize at their place of employment

E. Performance Objective: The student will demonstrate the ability to create a spreadsheet applicable to the type of work performed on the job.

1. Activity:
   a. The student will create and complete a spreadsheet relative to the type of work he/she performs on the job utilizing all the skills they have learned in chapters 1 through 5.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 11

I. Independent Project--Company Spreadsheet / Intermediate Lotus
   A. How To Get Started
   B. Planning Your Spreadsheet
LESSON PLAN

A. Course Title: Lotus 1-2-3

B. Lesson Plan 12

B. Topic: Company Worksheet / Intermediate Lotus

C. Prerequisite: Lesson 11

D. Purpose: To create a worksheet the student can use at his/her place of employment or home

E. Performance Objective: The student will demonstrate the ability to create a worksheet applicable to the type of work he/she can perform at work or home.

1. Activity: The student will create and complete a spreadsheet relative to the type of work performed on the job or at home.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 12

I. Independent Project Company Spreadsheet / Intermediate Lotus
   A. Modifying Your Spreadsheet
   B. Creating a Graph To Go With Your Document
A. Course Title: Lotus 1-2-3
B. Lesson Plan 13

B. Topic: Company Worksheet / Intermediate Lotus

C. Prerequisite: Lesson 12

D. Purpose: To create a worksheet the student can use at his/her place of employment or home

E. Performance Objective: The student will demonstrate the ability to create a worksheet applicable to the type of work he/she perform at work or at home.

1. Activity: The student will create and complete a spreadsheet relative to the type of work performed on the job or at home.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 13

I. Creating A Company Spreadsheet / Intermediate Lotus
   A. Individual Consultation
   B. Group Consultation
**LESSON PLAN**

A. **Course Title:** Lotus 1-2-3  
B. **Lesson Plan 14**

B. **Topic:** Company Worksheet / Intermediate Lotus

C. **Prerequisite:** Lesson 13

D. **Purpose:** To create a worksheet the student can use at his/her place of employment or home

E. **Performance Objective:** The student will demonstrate the ability to create a worksheet applicable to the type of work he/she performs at work or home

1. **Activity:** The student will create and complete a spreadsheet relative to the type of work performed on the job or at home.

2. **Conditions:** Classroom

3. **Standards:** 70 percent on instructor-developed multiple choice exam.

F. **(Equipment, Materials, Resources Required)**

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
B. Lecture Number: 14

I. Company Spreadsheet / Intermediate Lotus
   A. Individual Consultation
   B. Group Consultation
LESSON PLAN

A. Course Title: Lotus 1-2-3

B. Lesson Plan 15

B. Topic: Review Chapter 1, 2 and 3 / Introduction to Lotus

C. Prerequisite: Lesson 14

D. Purpose: To re-examine material covered

E. Performance Objective: The student will review terminology, function keys, and function commands utilized to create a spreadsheet and manage a large spreadsheet.

1. Activity: The student will view the data show overhead as instructor performs key functions and commands covered in Chapter 1, 2, and 3.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3

B. Lecture Number: 15

I. Review Chapter 1, 2, and 3 / Intermediate Lotus
   A. Creating a Spreadsheet
   B. Managing a Large Spreadsheet
A. Course Title: Lotus 1-2-3

B. Lesson Plan 16

B. Topic: Review Chapter 4 and 5 / Intermediate Lotus

C. Prerequisite: Lesson 15

D. Purpose: To re-examine material covered

E. Performance Objective: The student will review terminology, function keys, and commands utilized to create and print graphs and create templates and macros.

1. Activity: The student will view the data shown on the overhead as the instructor performs key function and commands covered in chapters.

2. Conditions: Classroom

3. Standards: 70 percent on instructor-developed multiple choice exam.

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LECTURE OUTLINE

A. Course Title: Lotus 1-2-3
   B. Lecture Number: 16

I. Chapter 4 and 5 / Intermediate Lotus
   A. Review Create and Print Graphs
   B. Review Create Templates and Macros
SAFETY IN THE WORKPLACE
WORKSHOP

PUEBLO COMMUNITY COLLEGE
E. SIUEY
INTRODUCTION

SAFETY IS AN ATTITUDE!

We ignore safety features repeatedly, seat belts in a car, guards on a machine, etc. Some work environments have more hazards than others; for example: mines, machine shops and fireworks factories. All have hazards that in most cases have already been recognized, like dust and radiation. We need to be aware of them before we enter the work area and take the necessary precautions. In 1970, Congress passed the Williams-Steiger Occupational Safety and Health Act (OSHA). Its purpose is, "...to assure so far as possible every man and woman in the nation safe and healthful working conditions and to preserve our human resources."

We need to put the same or even more enthusiasm and effort into learning safety habits on the job and in our work area, that we put into getting the job done. We should be aware of what is going on around us all the time. The most insidious hazard is the one that happens in small doses and builds up to an irreversible problem in our bodies.

Employers want you to work safely and avoid injury on the job, but they are also concerned about you when you are not on the job. They may not be liable if an injury occurs someplace else; but if you cannot work, it affects the performance of the company. Does one job make that much difference? You bet it does! There is no substitute for an experienced, well-trained person in any job; therefore, the company is concerned about your safety 24 hours a day.
WORKSITE FIRE EMERGENCIES

WHAT TO DO WHEN FIRE BREAKS OUT

If a fire did break out on the worksite, would you know what to do? Knowing how to react
in a fire emergency can truly mean the difference between life and death.

YOUR FIRST MOVE

Many small and self-contained fires can be safely extinguished on the spot. However, if you
are in any doubt as to the seriousness of the fire, sound the fire alarm immediately and begin
evacuating the building. Know where fire alarm boxes are situated in your workplace, learn
your company's evacuation procedures, and know the locations of established escape routes.

FIGHTING SMALL FIRES

If you are certain that a small or self-contained fire does not pose an immediate threat to you,
your co-workers, or the surrounding area, you may be able to put it out with the
'appropriate' fire extinguisher. there are many varieties of fire extinguishers, but each is
rated according to the type or types of fires it can put out. Before you use an extinguisher,
check to see if it is rated for the type of fire you are confronting. (This information must be
prominently listed on the extinguisher itself.) Please don’t wait for a fire to learn where fire
extinguishers are located and what ratings they carry. And, before you find yourself in a fire
emergency, take a moment to learn the four basic types of fires.
FOUR TYPES OF FIRES

A. Wood, paper, cloth, rubbish, etc.
B. Flammable gas/liquids - like oil, grease, paint
C. Electrical fires
D. Combustible metals

REMEMBER

Your safety comes first. If you are in doubt about the seriousness of any fire, don’t hesitate -- sound the alarm and evacuate the premises.

► Know the location of fire alarms and emergency exits.
► Check extinguisher to see if it is rated to put out the type of fire you are confronting.

FIRE PREVENTION

GUIDES TO WORKSITE FIRE SAFETY

Fire can be one of the most devastating of all industrial emergencies. Each year accidental fires in the workplace cost thousands of people their livelihoods, and for thousands more, their lives. Perhaps the saddest fact of all is that most of these fires could have been prevented. By recognizing fire hazards and learning how to correct them, you can help prevent fires and save lives.

RECOGNIZING FIRE HAZARDS

Industrial fires can be caused by a variety of hazards including unprotected or faulty
equipment, unsafe storage of combustible materials, inadequate ventilation, failure to follow
established safety guidelines (such as smoking in restricted areas), inattention, human error,
and arson. Fortunately, most of these fire hazards can be recognized and corrected by
knowing your company’s safety procedures and keeping alert to potentially dangerous
situations.

PREVENTING FIRE HAZARDS
You can help prevent fires at your worksite by following these guidelines:

A. Keep equipment and machinery clean and in good operating condition.
B. Make sure that all electrical equipment is protected.
C. Never overload circuits.
D. Store flammable/combustible materials in appropriate containers away from heat
   source.
E. Keep work and refuse areas clean and free of debris.
F. Dispose of flammables according to established safety guidelines.
G. Never leave open flames unattended.
H. Use caution when operating welding and other spark-producing equipment.
I. Clean (if appropriate) or report all spills.
J. Report suspicious persons to security or plant manager.
K. Keep fire exits/escape routes clear and well-marked.
L. Know where alarm boxes are located.

Following safety guidelines and recognizing potential hazards can help you prevent fires at
your worksite.
COURSE SYLLABUS
I. Safety in the Workplace
   A. Hand and Portable Tools
      1. Safety practices
      2. Safety program to control tool accidents
   
   B. Maintenance and Repair
      1. Inspection control
      2. Redressing tools
      3. Handles
   
   C. Use of Hand Tools
      1. Misuse
      2. Screwdrivers
      3. Hammers
      4. Pouches
      5. Metal cutting tools
      6. Stamping and marking tools
      7. Tap and die work
      8. Hack saws
      9. Files
     10. Hand snips
     11. Cutters
   
   D. Wood Cutting Tools
      1. Chisels
      2. Saws
      3. Axes and hatches
   
   E. Miscellaneous Cutting Tools
      1. Knives
      2. Ring knives
   
   F. Material Handling Tools
      1. Crow bars
      2. Hooks
      3. Shovels
      4. Rakes
G. Torsion Tools
1. Torque wrenches
2. Adjustable wrenches
3. Pipe wrench
4. Pipe tongs
5. Pliers
6. Special cutters
7. Nail band crimpers
8. Pullers
9. Spark resistant tools
10. Soldering irons

H. Portable Power Tools
1. Safety Precautions
2. Inspection and repair
3. Electric tools
4. Electric drills
5. Electric saws
6. Grinding wheels
7. Sander belts and disk type
8. Air-powered tools

I. Special Power Tools
1. Flexible shaft tools
2. Hydraulic power tools
3. Gasoline power tools
4. Prevention of fires
5. Precautions
6. Power-actuated tools
7. Power-drive sockets

J. Personal Protective Equipment
1. Clothing
2. Eye protection
LESSON PLAN

A. Course Title: Safety in the Workplace/Cortez Construction

B. Lesson Plan 1

B. Topic: Hand tools

C. Prerequisite: None

D. Purpose: Instruction in proper use of hand tools

E. Performance Objective: The student will be able to demonstrate proper safety practices in using hand tools

1. Activity: Lecture
2. Condition: Classroom
3. Standards:

F. (Equipment, Materials, Resources Required)

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LECTURE OUTLINE

A. Course Title  Safety in the Workplace/Cortez Construction  B. Lecture Number: 1

I. Hand and Portable Power Tools
   A. Preventing Accidents
      1. Safe practices
         a. Always wear safety goggles
         b. Select the right tool for the job
         c. Keep tools in good condition
         d. Use tools correctly
         e. Keep tools in place

      2. Safety program to control tool accidents
         a. Train employees to select right tool for the job
         b. Establish regular tool inspection
         c. Train for correct use of tools
         d. Establish procedure for control of company tools
         e. Proper storage facilities
         f. Enforce use of PPE
         g. Plan each job in advance

   B. Maintenance and Repair
      1. Start with best tools available

      2. Inspection and Control
         a. Tool room attendant should be qualified to inspect tools
         b. Should be periodic inspections of Tool Room by department head (no delegation
         c. Attendant should be trained to repair and sharpen tools receiving heaviest wear

      3. Redressing tools
         a. Discard tools having chipped, battered or mushroomed striking or struck surfaces
         b. Rigidly support the tool
         c. Use a hand file or whetstone only NEVER a grinding wheel - file or stone away from edge
         d. Restore the original contour of the cutting edge

      4. Handles
         a. Hickory, ash or maple with straight grain
         b. Fiberglass or steel with rubber sleeve
         c. Replace properly
II. Use of Hand Tools
A. Misuse Causes Injury Don’t Assume that Anybody Knows How
B. Learn the SAFE Practices Used by the Competent and Safe Worker
C. Wear Safety Goggles and Set Up Shield to Protect Others
D. Exposed Persons should Wear Safety Goggles if no Barrier is Available
E. Screwdrivers
1. Most commonly used and abused tool
2. Select tip to fit the screw
3. Redress if tip is not square and sharp
4. Hold work in vise or lay it on a flat surface to prevent injury if screwdriver slips
5. Use insulated handle around electrical equipment be sure poser is off before starting work.

F. Hammers
1. Should be selected for intended use and used only for those purposes.
2. Basic rules
   a. Wear safety goggles.
   b. Strike squarely with face parallel with surface being struck.
   c. When striking another tool (chisel, punch, wedge, etc.) hammer face should be 3/8 inch larger than struck face of tool
   d. Always use hammer of suitable size and weight for the job.
   e. Never strike another hammer with a hammer
   f. Never use a hammer with a loose or damaged handle.
   g. Discard if dented, cracked, mushroomed or chipped. Do not recommend redressing.
3. Types of Hammers
   a. Common nail - Curved claw and straight or ripping claws
   b. Ball Peen - for chisels and punches, riveting, shaping and straightening soft metal
   c. Sledge - for striking wood, metal, concrete or stone
   d. Hand drilling - use with chisels, punches, star drills and hardened nails
   e. Bricklayers - has sharp hardened cutting edge (never strike metal or struck tools including masonry tools)
   f. Riveting and setting - drive and spread unhardened rivets in sheet metal; glazing point, form corner, peen seam
   g. Many other - scaling chipping soft face, nonferrous, magnetic, engineer’s, blacksmith

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G. Punches
1. Designed to mark materials softer than the point; drive and remove pins and rivets
2. When using to punch a hole in sheet metal use end grain of wood block to back up after punching, turn over and flatten with mallet
3. Never use a punch with a mushroomed struck face or a dull, chipped or bent point.

H. Metal Cutting Tools
1. Chisels - cold chisels have a cutting edge at one end.
2. Flat - used for cutting, shearing and chipping
3. Diamond Point - Cuts V grooves, sharp interior angles
4. Cape Chisel - Cuts keyways, slots and square corners
5. Round Nose - Cuts rounded or semicircular grooves. It can draw back a drill that wanders from its intended center
6. Select a chisel that is just large enough for the job so that the blade is used, not just a point or corner.
7. Sponge rubber pad forced over end makes protective cushion for hand.
8. Several ways to hold - palm up, loose fist, et.

I. Stamping and Making Tools
1. Usually of specific alloys
2. Holders should be used, if possible to keep fingers clear

J. Tap and Die Work
1. Requires special precautions
2. Mount work firmly in vise
3. Use proper size tap wrench
4. Keep hand clear of broken tap ends
5. Use goggles when removing broken taps with punch and hammer
6. Keep hand and arms clear of sharp threads coming through a hand die on long cuts

K. Hack Saws
1. Install blade in frame with teeth pointing forward and tightened enough to prevent buckling and breaking. Too tight will break pins.
2. 14 teeth to the inch - soft metal
3. 18 teeth to the inch - tool steel, iron pipe, hard metal and
4. 24 teeth to the inch - drill rods, sheet metal, copper, brass, and tubing
5. 32 teeth to the inch - thin sheet metal (less than 18 gage or 1.2 mm) and tubing
6. Do not continue an old cut after changing to a new blade

L. Files
1. Select right kind of file for the job.
2. Use only with a secure handle, smooth and crack free.
3. Clean with a file cleaning card. Don't strike against vise, etc.
4. Do not use for hammer or pry.
5. Do not make into another tool - too brittle.
6. Clamp work at waist height.
7. Grasp handle firmly in one hand and use thumb and forefinger of other to guide the point. Push file forward and bear down on it. Release pressure and bring back for next stroke.
8. Lathe work should be done left handedly.

M. Hand Snips
1. Should be heavy enough to cut the material so easily that only one hand is needed on snips and other can keep edges of cut material pulled aside.
2. Support before last cut so cut edges do not press against hands.
3. Keep jaws tight and well lubricated.
5. File off jagged edges and livers.

N. Cutters
1. Used on wire, rebar, or bolts.
2. Should be large enough for job.
3. Designed to cut at right angles only.
4. Should not be rocked.
5. Lubricated often.
6. Do not use a pry bars or to pull nails.
7. Adjust bumper behind jaws for .003 cutting edge clearance.
III. Wood Cutting Tools
   A. Use safety goggles
   B. Cut away from body
   C. Keep edges sharp
   D. Wood Chisels
      1. Instruct in proper use
      2. Wood handles should be free of splinters and, if struck, should have metal or leather ring.
      3. Clamp work of secure from movement.
      4. Store so that sharp edges are protected.
   E. Saws
      1. Crosscut or rip - number of points per inch stamped on blade
      2. Keep sharp with proper set
      3. Lightly oil for storage
   F. Axes and hatches
      1. Keep sharp - a dull axe will glance off the wood (may cause injury)
      2. Clear area to swing - all vines, brush and shrubbery, especially overhead vines.
      3. Wear safety shoes, goggles and heavy pants.

IV. Miscellaneous Cutting Tools
   A. Planes, scrapers, bits, and drawknives
   B. Should be used by trained employees
   C. Keep sharp
   D. Store so the use is protected, and damage is prevented
   E. Knives
      1. More frequently the source of disabling injury than any other hand tool
      2. Use hand guard or finger ring and swivel to keep hand from slipping onto blade.
      4. Use retractable blades whenever possible.
      5. Keep in racks with edges guarded when not in use (keep separate from other tools)
      6. Do no wipe on apron or clothing. Use towel with edge turned away from wiping hand
      7. Wash separately so not hidden by soapy water.
      8. Carry in pouch or sheath. Tip must not stick out.
F. Ring Knives
1. For cutting string
2. Keep cutting edge outside hand.
3. Should be replaced with wall-mounted cutter or blunt-nosed scissors

V. Material Handling Tools
A. Crowbars
1. Should have a point or toe shaped to grip the object to be moved and a heel to act as a pivot or fulcrum.
2. Should be secured if stored standing on end so they won’t fall, or where they won’t be tripped over if laid on the ground.

B. Hooks
1. Keep sharp to prevent slipping.
2. Handle and point of long hoods are bent on the same plane

C. Shovels
1. Edges should be kept trimmed and handles should be checked for splinters
2. Wear heavy shoes with sturdy soles, use ball of foot to press into heavy material
3. Store hanging or standing against a wall, or keep in racks or boxes

D. Rakes
1. Don’t leave then with the prongs turned up.
2. If stepped on they can cause injury

VI. Torsion Tools
A. Be alert, wrench can slip, fastener can suddenly break loose, or just break. Tool can break. Be safely braced when pulling hard on a wrench.

B. Know the purpose an limitations of each type and size wrench:
1. Open end wrenches - Medium duty turning, susceptible to slipping
2. Combination wrenches - Use box end for initial loosening or final tightening.
3. Box and socket wrenches - Use where heavy pull is needed and safety is a consideration; comes in single hex, double hex, or double square.

C. Never use a pipe extension on a wrench handle.
D. Torque Wrenches  
1. Measures the amount of twisting force that is applied to a nut of bolt.  
2. Torque is turning force measured in foot pounds or newton-meters.  
3. Used when torque is specified or fasteners must be uniformly tight  
4. Calibration needs to be checked frequently.  

E. Adjustable Wrenches  
1. Recommended for light duty jobs or when proper size fixed opening is not available  
2. Place on nut with opening facing use (direction of pull)  
3. Easily fit metric nuts and bolts  
4. Pull, don’t push, movable jaw is weaker  

F. Pipe Wrenches  
1. To prevent slipping in awkward position, jaws should be kept sharp and clean.  
2. Frequently inspect adjusting nut for cracks  
3. Wrong length wrench is frequent cause of accidents  
   A. Too short - slips or not enough leverage  
   B. Too long - strip threads or break suddenly  
4. Cheater bar should not be used unless wrench is designed for it.  

G. Tongs  
1. Should be placed on pipe only after it’s aligned and ready to be made up  
2. Place a block of wood parallel to the pipe, injury to hand if tongs slip.  
3. Don’t jump or stand on tongs; get longer tongs.  
4. Handles should be designed to prevent pinching when closed.  

H. Pliers  
1. General purpose tool, often misused, designed for gripping and cutting  
2. Do not use for wrench substitute.  
   A. Slips easily  
   B. Rounds heads of bolts and nuts so a wrench won’t work on them  
4. Cushion grips, unless specified as insulated handles, are for comfort and should not be used on live electric circuits.
I. Special Cutters
1. Used for heavy wire, rebar and blots; and branding wire and strap
2. Only cutters designed for work provide safe and effective results.

J. Nail Band Crimpers
1. Makes it possible to keep top band on kegs and wood barrels after nails or staples have been removed
2. Eliminate injury from reaching into kegs or barrels that have projecting nails or staple points

K. Pullers
1. Only safe way to pull a gear, pulley, wheel or bearing off a shaft.
2. Select puller of correct size and jaw capacity with as large a pressure screw as possible.

L. Spark-Resistant Tools
1. Made of nonferrous materials (beryllium copper alloy, for example)
2. Reduces but does not eliminate hazards from sparking
3. inspect before each use to be sure that they haven’t picked up foreign particles that could produce friction sparks.

M. Soldering Irons
1. Source of burns and illness resulting from fumes
2. Use local exhaust ventilation, especially in continuous operations.
3. Use holder that completely encloses heated surface and is inclined so that the weight of the iron keeps it from falling out.
4. Do not allow lead solder particles of accumulate.

VII. Portable Power Tools
A. Five groups according to power source: Electric, Pneumatic, Gasoline, Hydraulic, Powder Actuated
B. Several types of tools common to the first three are saw, drills, and grinders.
C. Hydraulic tools are used mainly for compression work.
D. Powder tools are used for penetration work, cutting, and compression.
E. Safety hazards of a portable power tool are similar to that of a stationary tool of the same kind, in addition to the risks of handling.
F. Typical sources of injuries include electrical shock, fires, falls, particles in eyes, falling tools, and explosion of vapors or gases.

G. Safety Precautions
1. Disconnect power before changing accessories.
2. Make sure guards are correctly adjusted.
3. Do not leave overhead where a puller cord or hose could cause it to fall.
4. Keep cords and hoses from becoming a tripping hazard; suspend or use straps.
5. Use manufacturer’s operating rules and safe practices attached to each tool.
6. Select tools properly. A tool that is too light can cause undue fatigue and may fail.

H. Inspection and Repair
1. Periodic inspections, at least annually
   A. A defective tool should be tagged and taken out of service.
   B. Cleaning should be done with nonflammable nontoxic solvent using air drying in place of compressed air.

I. Electric Tools
1. Rechargeable battery-powered tools are safer. No cords low voltage
2. It is possible for a tool to operate with an electrical defect, therefore, a ground wire is mandatory for all but double-insulated tools.
3. Double-insulated tools
   A. Provide more reliable shock protection without third-wire grounding
   B. Small capacity tools have nonconductive case.
   C. Large capacity tools with metal case have internal layer of insulation in addition to functional insulation of components.
4. Electric Cords
   A. Should be inspected periodically, and heavy duty plugs should be used.
   B. Terminal screws should be protected with insulation.
   C. Employees should be trained not to jerk cords and protect them from sharp objects, and for tools with grounding should be three-wire-grounded-connection type.
J. Electric Drills
1. Types of injuries
   A. Drill pushes into hand, leg, etc.
   B. Eye injury by broken bit or material being drilled.
2. Prevention methods
   A. Use drill bit only as long as necessary
   B. Use a sleeve to protect hand and act as stop.
   C. Use an adapter with a speed-reduction gear for oversize bits.
   D. Clamp small pieces to prevent whipping.

K. Electric Saws
1. Must have a guard above and below the face plate, and the lower guard must automatically retract to cover exposed teeth. Must be grounded unless double insulated or batter operated and must have a dead-man switch.
2. Start and stop outside work.
3. Should not be jammed into work.
4. Keep body out of line of cut.

L. Grinding Wheel
1. Because of hazards operator should comply with ANSI standards B7.1 and B7.2
2. Because of hazards maintenance should comply with ANSI standards B7.1 and B7.2

M. Sanders Belt and Disk Type
1. Can cause serious skin burns; therefore, employees require thorough training.
2. Keep motion of sander clear of body.
3. Keep clothing clear of moving parts.
4. Dust-type goggles or face shield should be worn.
5. A respirator should be worn.
6. Keep dust to a minimum to prevent explosions.
7. Do no incinerate dust.
8. Keep fire extinguishers available.

N. Air-Powered Tools
1. Air Hose
   A. Presents same tripping hazards as electrical cords
   B. Suspend self-storing recoiling air hoses work well above workstation.
   C. Protect with two planks laid on either side when laid on floor.
D. Turn off air supply and bleed hose before disconnecting.
E. Do not use to clean machines or clothing.
F. Can whip about if disconnected when air is turned on.

2. Air-power grinders
A. Require same guarding as electrical grinders.
B. Maintenance of speed regulator is important to prevent overspeeding the wheel.
C. Regular inspection at each shift change is recommended

3. Pneumatic tools
A. Ear protection should be used if noise exceed federal time limits and level requirements.
B. Two safety devices required-
   1. Automatically closing valve actuated by a trigger located inside the handle
   2. A retaining device that holds the tool in place so that it cannot be fired accidentally from the barrel.
C. Two chippers should work away from each other, back to back to avoid flying chips.
D. Jackhammers should have heavy rubber grips to reduce vibration and fatigue

VIII. Special Power Tools
A. Flexible Shaft Tools
   1. Require some PPE as direct power tools of same type.
   2. When motor is started, the tools should be held firmly to prevent injury from sudden whipping.

B. Hydraulic Power Tools
   1. Hydraulic aerial lifts, chain saws, compression devices, etc.
   2. Injuries have occurred when employees put a hand over a pinhole leak in a hose or fitting.
   3. Hoses should be replaced with hose designed to hold the pressure.

C. Gasoline Power Tools
   1. Best known and most common is the chain saw.
   2. Hazards - Same as other saws in addition to the following special hazards:
      A. Falling while carrying a saw or while sawing
      B. Sprains and strains from carrying a heavy saw and working with it
      C. Being cut by contact with the chain while it is in motion
      D. Injuries from starting the gasoline engine
      E. Being cut by the chain when not in motion. Either on or off the saw
      F. Inhaling exhaust gases
G. Electric shock from electrically operated saws
H. Being struck by wood from overhead due to vibration of tree
I. Sawdust in the eyes, especially when holding the tail stock or stinger end of a saw above the head
J. Burns from contact with hot muffler or cylinder head
K. Injuries due to saws binding and "kicking back" at an operator
L. Injuries from falling trees and snags or rolling logs resulting from inability to hear because of engine noise.
M. Inexperienced employees should work with an experienced faller.

3. Prevention of Fires
   A. Under no circumstances should the gasoline tank be refilled while the engine is running.
   B. Any gasoline spilled on the tank or engine should be carefully wiped off before starting the engine.

4. Precautions
   A. Gasoline containers with a spout or funnel should be used.
   B. Tanks should be filled only in an area of bare ground.
   C. Motors should not be filled where a tank was previously filled
   D. Saws should be kept clean of gasoline, oil, and sawdust.
   E. Mufflers should be in good condition.
   F. Spark plugs and wire connections should be kept tight
   G. Fire extinguishers should be near poser saws at all times.
   H. Flammable materials should be kept clear and away from point of saw cut.

5. Workers operating chain saws must be sure footed. Sharp caulked boots, hob nailed shoes, and in the winter rubber soled shoes should be worn. Safety-toe footwear, protective helmets, and eye protection should be mandatory. A ballistic nylon patch covering part of the leg has reduced accidents. First aid kits should be provided at the jobsite. One individual in each crew should be trained in first aid. A snake-bite kit should be provided in areas where needed. Noise attenuating devices (ear muffs or plugs) should be used.
D. Power-Actuated Tools
1. Used to make force-entry fastening in various construction materials.
2. ONLY qualified trained operator should be allowed to use this equipment. To become a qualified operator, training should be under the supervision of a manufacturer's authorized instructor.
3. Training is required to demonstrate competence and pass a written exam. A Qualified Operator's Card will be issued, records of which are kept by certain regulatory agencies.

E. Power Drive Sockets
1. Usually use in heavy-duty operations and should be of high-quality and high strength alloy steel. Safety pins are designed to shear at definite pre-set pressure levels. Nothing but correct pins should be used. NO SUBSTITUTIONS - of nails or other items.
2. If noise cannot be controlled to meet OSHA requirements, ear protection should be used.
3. 100% eye protection should be enforced

IX. Personal Protective Equipment
A. Gloves, ties, loose clothing, and jewelry should not be worn by workers using revolving tools such as drills, saws, and grinders. The weight of most power tools makes it advisable for users to wear safety shoes to reduce chances of injury should the tools fall or be dropped.

B. Clothing should be free of oil, solvents, or frayed edges to minimize the fire hazard from sparks. When power tools are used in overhead places, the operator should wear a fall protection harness to minimize the danger of falling should the tool break suddenly or shock the operator. It is a good practice to attach a safety line to the tool to keep it from falling on person below if it is dropped.

C. Dust-type respirators should be worn on buffing, grinding, and sanding jobs that produce harmful dust. Hearing protective equipment should be used if more positive noise controls are not possible.

D. Eye Protection
1. In all operations where striking and struck tools are used, or where the cutting action of a tool causes particles to fly, eye protection (conforming to ANSI Z87.1) is needed by the user of the tool and by others who may be exposed to flying particles. The hazard can be minimized through the use of nonferrous, "soft striking tools and through shielding the job by metal, wood, or canvas. However, safety goggles are still required.
2. Safety goggles or face shields should be worn when woodworking or cutting tools such as saws are used with a chance of particles falling or flying into the eyes.

3. Safety goggles or face shields should be worn for work on grinders, buffing wheels, and scratch brushes because the unusual position in which the wheel operates may cause particles to be thrown off in all directions. For this reason, protective equipment is even more important than it is for work on stationary grinders.

4. Eye protection should also not be overlooked on such jobs as cutting wire and cable, striking wrenches, using hand drills, chipping concrete, removing nails from lumber, shoveling material or working on the leeward side of a job, using wrenches and hammers overhead, and on other jobs where particles of materials or debris may fall.
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Students involved in learning activities for the workplace will find that a knowledge of basic Spanish skills is extremely useful and will help prepare them for occasions when an understanding for a second language is essential. The students will be introduced to the study of conversational Spanish. The material in this unit is designed to provide the student with valuable experience and necessary practice in conversational Spanish. The content of this course is an outline of the basics of the Spanish language. Teacher and student generated handouts will address the particular workplace needs of the individual student.
COURSE OBJECTIVES

Workplace Spanish

At the completion of this course the student should be able to:

- Recite the alphabet
- Break words into syllables
- Understand and interpret key phrases used in the workplace
- Converse with other students in class in spanish
- Use the "listen" and "repeat" drill
- Write short paragraph in Spanish and present for class discussion
TIME AND MATERIALS

TIMING

There will be two meetings a week for eight weeks which will equal 32 hours of instruction.

Each class period will be divided into the following:

1. Presentation
2. Demonstration
3. Application
4. Instructor Feedback

Materials

Course syllabus
Handouts
Text
Paper and Pencil
# COURSE PLAN

## Daily Plan for Class

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<th>Activity</th>
<th>Time</th>
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<td>Introduction</td>
<td>5 Minutes</td>
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<tr>
<td>Presentation (Instruction)</td>
<td>40 Minutes</td>
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<tr>
<td>Demonstration (Student)</td>
<td>40 Minutes</td>
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<tr>
<td>In-Class work Period</td>
<td>20 Minutes</td>
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<tr>
<td>Summary and Evaluation</td>
<td>15 Minutes</td>
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**TOTAL** 120 Minutes

## Total Program Plan

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<tr>
<td>Presentation (Instructor)</td>
<td>11 Hours</td>
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<tr>
<td>Demonstration (Student)</td>
<td>11 Hours</td>
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<tr>
<td>In-class work (Student)</td>
<td>6 Hours</td>
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<tr>
<td>Summary and Evaluation</td>
<td>4 Hours</td>
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</table>

**TOTAL** 32 Hours
A. Course Title: WPL SPANISH

B. Unit Number 1

C. Topic: Spanish Pronunciation

D. Prerequisite: None

E. Performance Objective: The student should be able to identify and recite the letters of the alphabet. Stress the ll, rr, ch, e, and i, Spanish letters that are the most troublesome.

Activity: Class participation with instructor

F. Resources required:


Handout: Spanish Pronunciation
LECTURE OUTLINE

A. Course Title: WPL Spanish

B. Lecture Number 1

I. Spanish Pronunciation
   A. Spanish alphabet
   B. Spanish letters not in English alphabet

II. Phonetics of Spanish
   A. Vowels
   B. Specific consonant sounds
   C. Syllables
   D. Listen and Repeat
A. Course Title: WPL SPANISH
B. Unit Number: 2

C. Topic: Subject Pronouns, Gender

D. Prerequisite: Unit 1

E. Performance Objective: The student should be able to identify the gender and proper pronouns in Spanish

Activity: Lesson One, Basic Spanish Grammar
Exercise One, page 10
Exercise Five, page 14

LECTURE OUTLINE

A. Course Title: **WPL Spanish**

B. Lecture Number 2

I. Subject Pronouns

   A. Singular
   B. Plural

II. Gender

   A. Masculine
   B. Feminine
LESSON PLAN

A. Course Title:  
WPL SPANISH

B. Unit Number 3

C. Topic:  
La Familia

D. Prerequisite:  
Unit 2

E. Performance Objective:  
The student should be able to identify family members and translate from Spanish to English

Activity:  
Class participation with instructor

G. Resources Required:  

Handout: La Familia
LECTURE OUTLINE

A. Course Title: WPL Spanish

B. Lecture Number 3

I. La Familia
   A. Introduce Spanish names for members of a family
   B. Translation

II. Background for Addressing Elders
   A. Position in the family
   B. Age
<table>
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<tr>
<th>A. Course Title:</th>
<th>WPL SPANISH</th>
<th>Unit Number 4</th>
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<tr>
<td>C. Topic:</td>
<td>Numbers and Time</td>
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<td>D. Prerequisite:</td>
<td>Unit 3</td>
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<td>E. Performance Objective:</td>
<td>The student should be able to count to 100 and have an understanding of telling time in Spanish</td>
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<td>Activity:</td>
<td>Class participation with instructor</td>
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<td>Handouts:</td>
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<tr>
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<td>Handout: Numbers and Time/Horas del Dia</td>
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LECTURE OUTLINE

A. Course Title: **WPL Spanish**
B. Lecture Number 4

---

I. Numbers

A. Counting from 1 to 100
B. Writing numbers

II. Time

A. Telling time
B. Days of the week
C. Months of the year
LESSON PLAN

A. Course Title: WPL SPANISH

B. Unit Number: 5

C. Topic: Simple Statements and phrases

D. Prerequisite: Unit 4

E. Performance Objective: The student should be able to translate simple sentences and phrases.

Activity: Complete handouts in class

F. Resources Required:
   Handouts: Vamos a Hablar, Presentacion, Cosas de Interes
LECTURE OUTLINE

A. Course Title: WPL Spanish

B. Lecture Number 5

I. Simple Statements
   A. Greetings
   B. Questions
   C. Listen and Repeat

II. Simple Phrases
   A. Most used phrases
   B. Specific to the needs of the student
   C. Listen and Repeat
LESSON PLAN

A. Course Title: WPL SPANISH

B. Unit Number: 6

C. Topic: Job Related Dialogue

D. Prerequisite: Unit 5

E. Performance Objective: The student will translate phrases most used in the workplace.

   Activity: Student generated phrases for translation

LECTURE OUTLINE

A. Course Title: WPL Spanish

B. Lecture Number 6

I. Job Related Dialogue
   A. Questions
   B. Replies

II. Specific Job Related Phrases
   A. Questions
   B. Replies
LESSON PLAN

A. Course Title: WPL SPANISH

B. Unit Number 7

C. Topic: Job Related Dialogue

D. Prerequisite: Unit 6

E. Performance Objective: This is a continuation of previous week. The student will translate key phrases for the workplace.

Activity: Class discussion and communication

F. Resources Required: Student generated handouts
LECTURE OUTLINE

A. Course Title: **WPL Spanish**

B. Lecture Number 7

(Continuation of previous week)

III. Job Related Dialogue

   A. Related to workplace
   B. Related to clients
   C. Related to employers
   D. Related to employees
LESSON PLAN

A. Course Title: **WPL SPANISH**
B. Unit Number 8

C. Topic: Question-Answer Practice

D. Prerequisite: Unit 7

E. Performance Objective: Student will be able to ask and answer questions in Spanish that pertain to the workplace.

Activity: Class participation and handouts
Test Yourself: Lesson 1-5, *Basic Spanish Grammar*, page 48

Handout: *Question and Answer Practice*
LECTURE OUTLINE

A. Course Title: WPL Spanish

B. Lecture Number 8

I. Question Review
   A. Oral questions in Spanish
   B. Written questions in Spanish

II. Answer Review
    A. Oral answers in Spanish
    B. Written answers in Spanish

III. Review for Test in Text
ADDENDUM
Many people think that Spanish is the easiest language to learn. Perhaps they have this opinion because Spanish is a phonetic language and because there are definite rules that govern what syllables are to be stressed. Below you will find the Spanish alphabet and a guide to the pronunciation of each letter. It is not necessary to know the meaning of the word example. Just pronounce the word and get a feeling for the sound of the language.

a - a  cama, casa  Like English "ah," but shortened

b - be  banana, is Habana, ámbos  "B" and "V" are pronounced alike. When this letter appears at the beginning of a word group or before "m" or "n," it is pronounced like English "b." An example of the sound after "n" is given with the letter "v" since "n" rarely occurs before "b." When it appears between to vowels (a, e, i, o, u, y), it has a slightly different pronunciation. Prepare your lips as if you were going to pronounce the "b" sound but keep the center part of your lips open. If you have difficulty with this sound, don’t worry about it. Many Spanish Americans use the English "v" sound.

c - ce  cena, cine  coam, cosa, Cuba, secreto, clase  Like English "s" before "e" and "i," like English "k" before "a," "o," and "u" or another consonant

ch - che  muchacho, Chile  "Ch" is considered one letter of the alphabet and it is lifted separately in the dictionary after the word the words that begin with "c." It is pronounced like the English "ch" in "chicken."

d - de  dama, cada  The "d" sound is softer than that of the English "d." The tongue is placed against the inside os the upper front teeth and the lower teeth do not touch. When "d" occurs between two vowels, it is even softer, much like the "th" in "these."

e - e  mesa, cena  Pronounce the word "may." Notice that you are saying two sounds. "May" has an "ee" sound after the "a." Eliminate this "ee" sound and you will be Pronouncing the Spanish "e."
## SPANISH PRONUNCIATION

<table>
<thead>
<tr>
<th>Letter</th>
<th>Pronunciation</th>
<th>Example words</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>f - efe</td>
<td>fama, gafas</td>
<td>Pronounced like English h</td>
<td></td>
</tr>
<tr>
<td>g - ge</td>
<td>gemela, gitana, gala, gota, laguna</td>
<td>Like &quot;c,&quot; &quot;g&quot; has two sounds. It is pronounced like English &quot;h' before &quot;e&quot; or &quot;i&quot; and like the hard &quot;g&quot; in &quot;go&quot; before &quot;a,&quot; &quot;o,&quot; and &quot;u.&quot;</td>
<td></td>
</tr>
<tr>
<td>h - hache</td>
<td>Habana, hada</td>
<td>(h) Not pronounced</td>
<td></td>
</tr>
<tr>
<td>i - i</td>
<td>cine, gitano</td>
<td>Like English &quot;ee&quot; in &quot;seen&quot;</td>
<td></td>
</tr>
<tr>
<td>j - jota</td>
<td>jefe, paja</td>
<td>Like English &quot;h&quot;</td>
<td></td>
</tr>
<tr>
<td>l - ele</td>
<td>lana, alcalde</td>
<td>Like English, a little more lilting</td>
<td></td>
</tr>
<tr>
<td>ll - elle</td>
<td>calle, llama</td>
<td>Like English &quot;y&quot; in &quot;yet.&quot;</td>
<td></td>
</tr>
<tr>
<td>ñ - eñce</td>
<td>mañana, señor</td>
<td>Another separate letter of the alphabet. It is pronounced like English &quot;ny&quot; in &quot;canyon.&quot; They mark over the &quot;n&quot; is called a tilde.</td>
<td></td>
</tr>
<tr>
<td>o - o</td>
<td>mono, mano</td>
<td>Pronounce the word &quot;go.&quot; Notice that you are saying two sounds. &quot;Go&quot; has an &quot;oo&quot; sound after the &quot;o.&quot; Eliminates this last &quot;oo&quot; sound and you will be pronouncing the Spanish &quot;o.&quot;</td>
<td></td>
</tr>
<tr>
<td>p - pe</td>
<td>para, depende</td>
<td>Like English</td>
<td></td>
</tr>
<tr>
<td>q - co</td>
<td>que, aquello</td>
<td>As in English, &quot;q&quot; is followed by &quot;u&quot;. The pronunciation of &quot;qu&quot; is that of English &quot;k&quot;.</td>
<td></td>
</tr>
</tbody>
</table>
SPANISH PRONUNCIATION

r - ere  Madre, pero, alrededor, Enrique
This is probably the sound most different from English that we will learn. It is reduced
by vibrating the tongue against the tooth edge of the upper plate. The "tt" sound in the
slang expression "Atta boy!" closely approximates the Spanish "r." It has the stronger
sound of the next letter of the alphabet after the letters "l" and "n" and when it
appears at the beginning of a word group.

rr - erre  perro, correr, ramo
Again we have a letter in the Spanish alphabet that we do not have in the English
alphabet. It is pronounced like the Spanish "r" but is trilled stronger. There is also a
slightly breathy sound that accompanies the trill.

s - ese  saber, Isabel
Usually pronounced like the soft "s" in the English word "some."

t - te  tema, Evita
"T," like "d," is softer than that of the English "t." The teeth do not meet as they do to
pronounce the English "t" but rather the tongue is placed against the inside of the upper
front teeth.

u - u  una, pura
Like English sound of "oo" in "soon."

v - ve  vamos, ave, enviar
See "b" for pronunciation.

x - equis  expresar, exacto
Pronounced like an English soft "s" before a consonant and like a "ks" as in "excel"
before a vowel

y - i  griega ya, hoy
Pronounced like the Spanish "i"

z - zeta  zapatos, hazana
Like English "s"
SPANISH PRONUNCIATION

Often two or three vowels follow one another. Pronounce each vowel and slide them together. The combinations will be with and "i," "y," or "u":

baile, causa, agua, piano, hoy, Paraguay, buey

If there is no "i," "y," or "u," pronounce the two vowels as separate syllables:

leo (le/o), creer (cre/er), aeroplane (a/eoplane)

Stress the next to the last syllable if the word ends in a vowel, "n," or "s":

enslada, muchacho, imposible, hablan, paraguas,

For the letters of the alphabet, stress the last syllable:

hotel, cantar, cindad

Any syllable with a written accent receives the stress:

platanos, esta, dias
HANDOUT FOR UNIT 3
LA FAMILIA

el padre
the father
la madre
the mother
los padres
the parents
el hijo
the son
la hija
the daughter
los hijos
the sons, the children
el hermano
the brother
la hermana
the sister
los hermanos
the brothers, or the
hermanos
brothers and sisters

el abuelo
the grandfather
la abuela
the grandmother
los abuelos
the grandparents

¿Habla Ud. español?
Do you speak Spanish?
Sí, hablo español.
Yes, I speak Spanish.
Y mis padres también hablan español.
And my parents also speak
español.
Pero hablamos inglés en casa.
But we speak English at home.
Mi tío habla inglés con mi tía.
My uncle speaks English with my
aunt.
NUMBERS AND TIME
For Use With Unit 4

Time

<table>
<thead>
<tr>
<th>Hours</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 Es la una,</td>
<td>domingo</td>
</tr>
<tr>
<td>2:00 Son las dos,</td>
<td>lunes</td>
</tr>
<tr>
<td>3:00 Son las tres,</td>
<td>martes</td>
</tr>
<tr>
<td>4:00 Son las cuatro,</td>
<td>miercoles</td>
</tr>
<tr>
<td>5:00 Son las cinco,</td>
<td>jueves</td>
</tr>
<tr>
<td>6:00 Son las seis,</td>
<td>viernes</td>
</tr>
<tr>
<td>7:00 Son las siete,</td>
<td>sabado</td>
</tr>
<tr>
<td>8:00 Son las ocho,</td>
<td></td>
</tr>
<tr>
<td>9:00 Son las nueve,</td>
<td></td>
</tr>
<tr>
<td>10:00 Son las diez,</td>
<td></td>
</tr>
<tr>
<td>11:00 Son las once,</td>
<td></td>
</tr>
<tr>
<td>12:00 Son las doce,</td>
<td></td>
</tr>
<tr>
<td>3:15 Son las tres y cuatro,</td>
<td></td>
</tr>
<tr>
<td>2:45 Son las tres menos cuatro,</td>
<td></td>
</tr>
<tr>
<td>4:30 Son las cuatro y media,</td>
<td></td>
</tr>
<tr>
<td>5:30 Son las cinco y media,</td>
<td></td>
</tr>
<tr>
<td>2:10 Son las dos y diez,</td>
<td></td>
</tr>
<tr>
<td>1:50 Son las dos menos diez,</td>
<td></td>
</tr>
<tr>
<td>1:10 Es la una y diez,</td>
<td></td>
</tr>
<tr>
<td>12:50 Es la una menos diez,</td>
<td></td>
</tr>
<tr>
<td>1:15 Es la una y cuatro,</td>
<td></td>
</tr>
<tr>
<td>1:30 Es la una y media,</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>enero</td>
</tr>
<tr>
<td>febrero</td>
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<tr>
<td>marzo</td>
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<tr>
<td>abril</td>
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<tr>
<td>mayo</td>
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<tr>
<td>junio</td>
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<tr>
<td>julio</td>
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<tr>
<td>agosto</td>
</tr>
<tr>
<td>septiembre</td>
</tr>
<tr>
<td>octubre</td>
</tr>
<tr>
<td>noviembre</td>
</tr>
<tr>
<td>diciembre</td>
</tr>
</tbody>
</table>
NUMBERS

For use with Unit 4

1 - uno
2 - dos
3 - tres
4 - cuatro
5 - cinco
6 - seis
7 - siete
8 - ocho
9 - nueve
10 - diez
11 - once
12 - doce
13 - trece
14 - catorce
15 - quince
16 - dieciséis
17 - diecisiete
18 - dieciocho
19 - diecinueve
20 - veinte
21 - veintiuno
22 - veintidós
23 - veintitrés
24 - veinticuatro
25 - veinticinco
26 - veintiseis
27 - veintisiete
28 - veintiocho
29 - veintinueve
30 - treinta
31 - treinta y uno
32 - treinta y dos
33 - treinta y tres
34 - treinta y cuatro
35 - treinta y cinco
36 - treinta y seis
37 - treinta y siete
38 - treinta y ocho
39 - treinta y nueve
40 - cuarenta
50 - cincuenta
60 - sesenta
70 - setenta
80 - ochenta
90 - noventa
100 - ciento (cien)
105 - ciento cinco
110 - ciento diez
113 - ciento trece
117 - ciento diecisiete
120 - ciento veintidós
130 - ciento treinta
134 - ciento treinta y cuatro
140 - ciento cuarenta
148 - ciento cuarenta y ocho
160 - ciento sesenta
200 - doscientos
250 - doscientos cincuenta
277 - doscientos setenta y siete
300 - trescientos
400 - cuatrocientos
500 - quinientos
600 - seiscientos
700 - setecientos
800 - ochocientos
900 - novecientos
NUMBERS (con’t)

1,000 - mil
1,004 - mil cuatro
1,015 - mil quince
1,031 - mil trente y uno
1,492 - mil cuatrocientos
1,861 - mil novecientos setenta
2,000 - dos mil
10,000 - diez mil
40,139 - cuarenta mil clento treinta y nueve
100,000 - cien mil
785,026 - setecientos ochenta y cinco mil veintiseis
1,000,000 - un millón
50,000,000 - cincuenta millones
Horas del día

For use with Unit 4

1. ¿Qué hora es?
2. Es la una.
3. ¿Qué hora tienes?
4. Según mi reloj, son las dos.
5. Entonces el mío anda atrasado.
6. Pues date prisa, que vas a llegar tarde.
7. ¿A qué hora sales de casa?
8. Salgo a eso de las ocho.
9. Tomo el autobús a las ocho y cuarto.
10. Y llegamos aquí a las ocho y media.
11. ¿Cuánto falta para las doce?
12. Faltan sólo diez minutos.
13. ¿Come a las doce o a la una?
14. Ahora como a la una.
15. ¿Cuándo quieres ir al cine?
16. Por la tarde o por la noche, me es igual.
17. ¿Cuánto tiempo dura la película?
18. Unas de horas...más o menos.
19. Entonces tenemos tiempo esta tarde.
20. Pues nos veremos un poco antes de las cuatro.
VAMOS A HABLAR

For use with Unit 5

Sí
No
Por favor
Muchas gracias
De nada
No hay de que
Perdón

Yes
No
Please
Thank you very much
You’re welcome
You’re welcome
Forgive me (for something I’ve done)
Excuse me, with your permission

Con permiso

(for something I’m about to do: i.e., pass in front of some one,
leave the room, eat in someone’s presence)

No se.
No entiendo.
Repita Ud., por favor.
Hablo poco español.
Mas despacio en español.
¿Cómo se dice en español ________?
¿Es usted mexicano?
No, soy norteamericano.
¿Son ustedes puertorriqueños?
No, somos argentinos.
¿Es Clara norteamericana?
No, no es norteamericana.
COSAS DE INTERES

For use with Unit 5

Español

Domingo
Lunes
Martes
Miercoles
Jueves
Viernes
Sabado

arriba
abajo
a la derecha
a la izquierdo
norte
sur
este
oeste

cuadra
milla
pie
pulgada
yarda
metro

camino
camino real
corporacion
compania
Meses del año
vereno
otoño
invierno
primavera

Translate to Inglès
1. Your insurance premium is $102.42
   El premio de su seguro es $102.42

2. If your child is 19 and no longer a student, he/she is no longer covered by insurance.
   Si su hijo/hija tiene diecinueve años, y no está en la escuela, ya no está cobrado(a) con el seguro.

3. Can I help you?
   ¿Puedo ayudarlo?

4. How far is it to Juarez?
   ¿Cuál es la distancia de aquí a Juarez?

5. Pardon me, could you tell me where to find a policeman?
   Perdoneme, puede decirme donde puedo hallar un policía.

6. I work in a steel mill in the quality control department.
   Yo trabajo en una acería, en departamento donde se controla la calidad.

7. Could you direct me to a good place to eat or to a good hotel?
   ¿Me puede dirigir a un buen lugar para comer o a un buen hotel?

8. Where can I exchange some money?
   ¿Donde puedo cambiar dinero?

9. Do you know the telephone number of a mechanic?
   ¿Sabe usted el número de teléfono de algun mecánico?

10. Thank you, you have been a big help.
    Muchas gracias, ha sido mucha ayuda.
1. Good morning, how is everyone today?
Buenos días, como están todos hoy?

2. Please Gentlemen, no cooking on our down shift repair days!
Por favor señores, no cocineen en los días de reparación.

3. Where is the nearest gasoline station?
¿Donde está la gasolinera más cerca?

4. Where is the nearest RV (Mobile Trailer) park?
Donde está el estacionamiento más cerca para vehículos recreativos?

5. Would you please give me directions?
Por favor, déme dirección.

6. Would you please write that down?
Por favor, escribalo.

7. Would you please draw me a map to the:
Por favor, dibujeme una mapa para:
- Gas station
- RV park
- Tourist attraction

8. Do you have hook ups for:
Tiene conexiones para:
- Water?
- Electricity?
- Sewer?
- Una gasolinera
- Estacionamiento para un vehículo recreativo
- Atracciones para turistas
- Agua
- Electricidad
- Albaña; (desaguadero)

9. Do you have showers and toilets available for the park customers?
¿Tiene baño y excusado para los marchantes?

10. What in your area do you think we should tour?
¿En su vecindad, que cree usted que deberíamos ver?
11. **Directions:**

- north
- park
- south
- park
- east
- right
- west
- block(s)
- Left

- norte
- oarque
- sur
- estacinar
- este
- derecha
- oeste
- Cuadra(s)
- Izquierda
¿Cómo se llama usted?
¿Cómo te llamas tú?
¿Cómo está usted?
Tengo que irme.
Recuerdos a todos.
¿Cómo está Paco?
¿Cómo estás tú?
Buenas noches.
Buenos días.
Bastante bien, y tú.
Yo soy______.
ace.
Y tú eres______.
Mi apellido es______.
¿Sabes quién es ese señor?
Creo que es______.
Este es mi amigo (a).
Esa muchacha es.
¿Qué día es mañana?
Los meses del año son.
¿Dónde vive usted?
Yo vivo en la calle______.
¿Dónde trabaja usted?
Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
Yo trabajo en una oficina.
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Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
Yo trabajo en una oficina.
Yo trabajo en un taller donde fabrican ace.
1. Good morning, how is everyone today?
Buenos días ¿cómo están todos hoy?

2. Please Gentlemen, no cooking on our down shift repair days!
Por favor señores, no cocíneen en los días de reparación.

3. Excuse me, where may I find the rest room?
Perdóname, ¿dónde puedo hallar un excusado?

4. Excuse me, can you give me directions to the nearest gas station?
Perdóneme, puede usted darme direccióon a la gasolinera más cerca.

5. , would you please take the oil inventory?
Por favor, tome el inventário del aceite.

6. , what kinds of problems are we having on the mill?
¿Qué clase de problemas tenemos en la acería?

7. , how are you feeling today? May I get you anything?
¿Cómo se siente hoy, puedo traerle algo?

8. How far is it to the next town?
¿Cuánto (millas, kilómetros) hay al siguiente pueblo?

9. , do you want to work overtime today?
¿Quiere trabajar sobretiempo hoy?

10. Can you show me where you have the pain?
¿Puede enseñarme donde tiene el dolor?
Question - Answer Practice
For use with Unit 8

1. Paco
Jose

¿Que hora es?
Es la una.

2. Julian
Antonio

¿Ya son las dos?
Sí, según mi reloj, son las dos y cinco.

3. Mario
Angel

¿No anda bien tu reloj?
No, anda atrasado

4. Elisa
Carmen

¿Quieres ir al cine por tarde, o por la noche?
Me es igual.

5. Silvia
Margarita

¿Cuánto tiempo dura la película?
Dos horas, más o menos.

6. Sr. Vargas
Sr. Mendez

¿Que hora tiene usted?
Tengo las cuatro.

7. Sr. Vega
Sr. Jiminez

¿A que hora sale usted de casa?
Salgo a eso de las ocho.

8. Sr. Gamboa
Sr. Castillo

¿A que hora tomo usted el autobús?
A las ocho y cuatro.

9. Sra. Vela
Sra. Garcia

¿Cuánto falta para las doce?
Faltan sólo diez minutos.

10. Sra. Perez
Sra. Mendoza

¿Comen ustedes a las doce, o a la una?
Ahora comemos a la una.