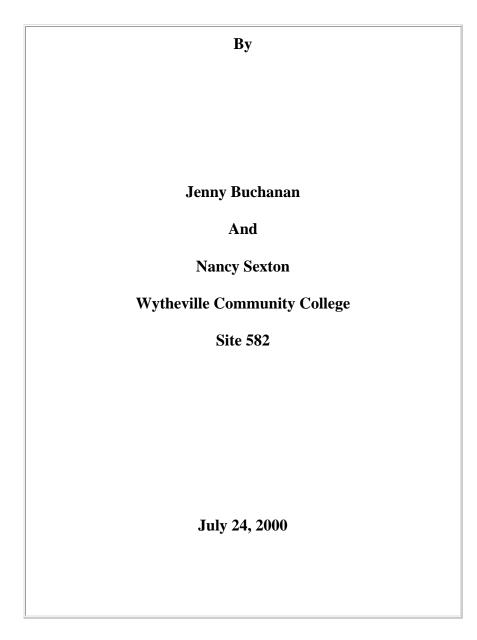


TECHNOLOGY LITERACY COURSE CURRICULUM FOR TEACHERS AND TRAINERS

For
Dr. John Ritz
OTED 785



CURRICULUM FOUNDATIONS

DEFINITION AND PHILOSOPHY FOR

TECHNOLOGY LITERACY FOR

TEACHERS AND TRAINERS COURSE

Technology literacy involves preparing teachers and trainers to be able to use computer software and the Internet to help them find and use information to instruct their employees or students. This introduction to technology will provide teachers and trainers with the fundamental concepts and skills for applying information technology in educational settings. This course will improve teacher training in basic computer

technology operations and concepts; provide a working knowledge of the personal and professional use of technology; and introduce the application of technology in instruction.

RATIONALE FOR TECHNOLOGY LITERACY FOR

TEACHERS AND TRAINERS COURSE

Our society is becoming more and more dependent upon technology to function in everyday life. Policies and procedures change so quickly that printed material is nearly outdated before it has finished printing. It is because of this rapidly changing technology that students/employees need to know how to use technology if for nothing else than to find current and accurate information. Teachers and trainers guide the learning of their students and employees; therefore, the more instructors know about technology the more they can incorporate into their instruction. Since instructors are there to guide students, it is even more important that the instructors are computer literate. By educating our teachers in computer technology literacy we will at the same time increase student/employee contact with technology. Teachers will be able to use technology to reach different learning styles that they may not have been successful at reaching before. Instructors will also be able to complete their administrative duties faster and thus have less paperwork and more time to dedicate to student needs. (Training teachers: an introduction to the training of the Houston school district.)

This curriculum development is an effort to help community college faculty and other teachers and trainers meet computer competencies necessary to provide the most effective computer experiences for students. Teachers must be provided with on-going opportunities to develop their understanding of the value of technology to themselves personally and professionally, and its effective uses in the classroom. This curriculum is directed toward helping teachers and trainers experience the benefits of using technology. Teachers personally need to understand the value of technology, then develop proficiency in the area, and finally develop effective means for teaching it to someone else. This provides teachers with the knowledge to develop their own ideas on how to share the benefits of technology with students and integrate technology as a learning tool throughout their curricula.

CONTENT SOURCE FOR TECHNOLOGY LITERACY FOR

TEACHERS AND TRAINERS COURSE

This curriculum content is driven by the need for teachers and trainers to acquire a working knowledge for using computer applications, and software and hardware in an educational setting. This course is designed to provide teaching faculty with a set of learning experiences using technology that will expand instructional approaches and

enhance the learning process for students. The content provides instruction at the beginning level for teachers and trainers who are "mouse illiterate." The purpose of the curriculum is to introduce teachers and trainers to the world of technology and its potential as an instructional tool in the classroom. Experience with the course shows the very basics from how to connect and use equipment, to how different kinds of technology can be used as an instructional and classroom management tool.

Many teachers worry about managing computers because they are not secure in their own knowledge of them. That lack of knowledge can be very disconcerting for a teacher who is used to being organized, hands-on, and goal-oriented. The content of this course will provide teachers and trainers with the ability to use, with confidence, a range of appropriate information technology applications for information access, development and presentation of materials, and communicating management of learning.

A CONTENT STRUCTURE FOR TECHNOLOGY LITERACY FOR TEACHERS AND TRAINERS COURSE

The structure for the content of this course is found in Figure 1.

Overcoming Negative Attitudes and Fears about Technology					
I					
What Computers and Computer Programs Can and Can Not Do					
I					
The Impact of Computers on Society					
I					
Computer Hardware					
I					
Operating System - Windows					
I					
Using Computer Applications					

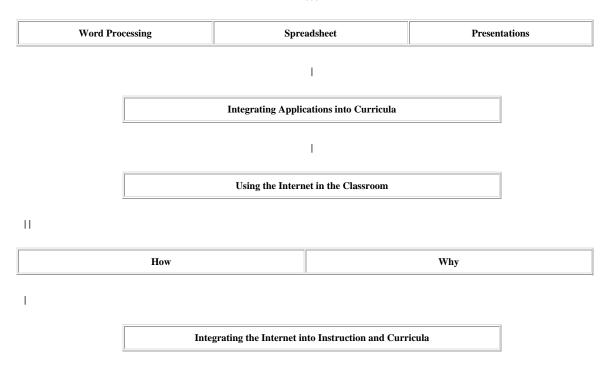


Figure 1

TECHNOLOGY LITERACY FOR

TEACHERS AND TRAINERS COURSE

AIM AND GOALS

The program aim of the Technology Literacy Course is to provide teachers and trainers with the basic technology skills for applying information technology in educational settings. The learner will develop skills to operate a computer and use computer aids, use various software applications effectively, use the Internet, and integrate technology into instruction and curricula.

This curriculum will provide instruction that will:

- 1. Develop the student's ability to recognize and overcome negative attitudes about technology, and their fears of using technology.
- 2. Explain the impact of computers on society.
- 3. Develop the student's working knowledge of the use of computers.
- 4. Develop the student's ability to use Windows, word processing, spreadsheets, and Presentations software.
- 5. Introduce the student to methods of integrating applications into instruction and curricula.
- 6. Introduce the learner to the Internet and the use of the Internet both personally and professionally.

- 7. Develop the learner's knowledge to use the Internet effectively in an instructional setting.
- 8. Develop the learner's ability to use Presentations software for instructional purposes.

CURRICULUM CONTENT

TECHNOLOGY LITERACY FOR TEACHERS AND TRAINERS

SCOPE AND SEQUENCE

SUMMARY					
TOPIC	WEEKS				
Introduction	1				
Overcoming Negative Attitudes and Fears about Technology.	1				
The Impact of Computers on Society.					
What Computers Can and Can Not Do:	2				
Operating Computers.					
Using Computer Applications - Word Processing	2				
Using Computer Applications - Spreadsheets	2				
Using Computer Applications - Presentations	1				
Integrating Applications into Curricula	2				
Using the Internet	1				
Integrating the Internet into Instruction and Curricula	2				
Results	1				
Evaluation	1				
Total	16				

16-week semester/1 hour lecture/2 hour laboratory/3 hours per class meeting, 2 class meetings per week.

SCOPE and SEQUENCE

- Week 1 <u>Introduction</u>
- History and Evolution of Technology
- Today s uses and requirements for Technology
 - Overview of Course topics

- Week 2 Attitudes & Fears & the Impact of Computers on Society
- Common Responses to Technology
- Falsehoods about Technology
- From where does this Fear Arise?
- Overcoming Attitudes & Fears
- Uses of Computer in Society
- Outlook for computer usage
- Week 3 Operating Computers
- Basic Computer Hardware
- Windows
- Basic Maintenance and Upkeep
- Week 4 - What Computers Can & Can Not Do
- Computers Abilities and Limits
- Week 5 - Word Processing
- Uses for Word Processing
- Types of Word Processing Software
- Commands
- Toolbar
- Week 6 Word Processing
- Tables
- Graphics
- Printing
- Templates

- Week 7 Spreadsheet
- Types of Spreadsheet Software
- Entering data
- Commands
 - Week 8 <u>Spreadsheets</u>
- Formulas
- Graphing
- Using with Other Software
 - Week 9 <u>Presentations</u>
- Uses & Types of Software
- Commands
- Tools
- Using Graphics
- Presentation Development
- Showing Presentation
 - Week 10 <u>Integrating Applications into Curricula</u>
- Word Processing
- Create Syllabus
- Create Web Sites
- Spreadsheets
- Maintain Student Records
- Create Graphs for Lectures
- Presentations using to Present Lecture Material and Student Projects

Week 11 - Integrating Applications into Curricula Presentations - To present Lectures to Students/Trainees - Student use to Present Projects - Week 12 - Using the Internet - Internet use and Software - Searching the Net - Tools/Commands - Creating Web Sites - Week 13 - Integrating the Internet into Instruction and Curricula - Email - Search Engines - Creating Web Sites for your Course - Week 14 - Integrating the Internet into Instruction and Curricula - Web Based Courses - Class Research and Instructor Updates - Week 15 - Results - Week 16 - Evaluation **UNIT:** Introduction TIME: 1 week, 2 classes, to include 6 hours of lecture. **GOALS**:

1. Outline the topics to be discussed in preceding units.

2. Discuss the required competencies and assignments.

RATIONAL FOR UNIT:

The purpose of the Introduction Unit is to inform the student of the subject matter to be covered and the significance of the material to the student's field of study. This unit will also provide the requirements and expectations of the student, and the deadlines for assignments.

OBJECTIVES FOR UNIT:

- 1. Provide a brief overview of the topics that will be discussed in future units and the relevance of each to the student.
- 2. Explain how the student will be graded on assignments.
- 3. Outline the activities and required assignments.

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POSSIBLE UNIT ACTIVITIES:

- 1. Have each student to introduce himself or herself and provide their level of knowledge with technology and their educational area of interest.
- 2. Go over the course syllabus with the students as to the requirements and assignments.
- 3. Using the syllabus briefly touch on the subjects to be covered.

REFERENCES:

Course Outline (Attachment A)

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<u>UNIT:</u> Impact of Computers on Society and Overcoming Negative Attitudes and Fears

Towards Technology.

<u>TIME:</u> 1 week, 2 classes per week to include 3 hours of lecture each class. Total of 6 hours.

GOALS:

1. Explain to students, the impact of computers on society.

2. Identify the reasons why people reject or fear technology and how to overcome those fears.

RATIONAL FOR UNIT:

With technology usage growing so rapidly it is important that teachers/instructors understand the impact that technology has on society. This understanding is necessary so that they are aware of the importance of technology in their instruction. Understanding the importance of technology in their instruction will also provide their students/trainees with a greater level of exposure to technology through the instructor. However, to be able to stress the importance of technology to both instructors and their students we must first address any fears or negative attitudes that the student may hold towards technology so that they are open to learn about it. Our students also need to be able to recognize these fears and attitudes in their own students and be able to help them overcome these fears.

OBJECTIVES FOR UNIT:

- 1. Describe the impact of technology on society.
 - 2. Provide the reasons why people have fears or bad attitudes toward technology.
 - 3. Provide students with the ability to recognize these fears and attitudes in themselves and their students/trainees.
 - 4. Help students to use the techniques learned to overcome their fears and negative attitudes towards technology if they exist.
 - 5. Be able to use the techniques learned to help their students/trainees to overcome negative attitudes and fears towards technology.

POSSIBLE UNIT ACTIVITIES:

- 1. Read chapter text on the impact of technology on society.
 - 2. Group discussion on the students' experience with technology and how it has impacted their jobs or lives.
 - 3. Have students find articles and do an abstract of the article about the impact of technology on society.
 - 4. Group discussion on experience with negative attitudes or fears about technology that students have experienced or seen.

- 5. Lecture on ways to recognize fear and negative attitudes about technology.
- 6. Lecture on methods to correct these fears and negative attitudes.

REFERENCE:

<u>How to Use Computers:</u> Visually in Full Color, <u>Lisa Biow</u>. **Format:** Paperback, **ISBN:** 0789716453, **Publisher:** Que, **Pub. Date:** June 1998.

UNIT: What Computers Can and Can Not Do:

Operating Computers

<u>TIME:</u> 2 weeks, 2 classes per week to include 1 hour of lecture and 2 hours of lab per class for a total of 12 hours.

GOALS:

- 1. Teach the student the correct way to turn the computer on and off.
- 2. Demonstrate the proper use of a computer mouse.
- 3. Enhance the student's personal and professional productivity through the use of electronic technologies.
- 4. Develop the student's knowledge and skills in understanding the input and output processes of technology.
- 5. Teach the student to identify hardware and software.
- 6. Develop the student's ability to install and use various computer aids for instructional purposes.

RATIONAL FOR UNIT:

A competent teacher or trainer should have the ability to use information technology to support everyday classroom or fieldwork activities. These characteristics may be developed through the study of computer operations and using applications for personal and professional use. Teachers today should have an understanding of the ways in which information technology contributes to teaching and learning. This means the teacher should be able to use computer applications with a high degree of mastery, tackle new applications without hesitation, and assess the educational potential of new technologies.

OBJECTIVES FOR UNIT:

- 1. Review the requirements for the safe operation of the computer and computer aids.
- 2. Review the basic functions of the Windows Operating System.

- 3. Demonstrate the basic functions of computers such as opening, closing, saving, and retrieving files.
- 4. Demonstrate the use of computer aids for instructional purposes.

POSSIBLE UNIT ACTIVITIES:

- 1. Turn the computer on then turn off the computer using the Windows Shutdown feature.
- 2. Demonstrate the proper use of the mouse.
- 3. Guide the student through the basic features of the Windows Operating System.
- 4. Use Word to open, create, print, save, delete, and close a file.
- 5. Demonstrate the use of the floppy and CD-ROM Drives.
- 6. Guide the student through the use of various hardware components including a printer.

REFERENCES:

See References in the Unit on Impact of Computers on Society and Overcoming Negative

Attitudes and Fears Towards Technology

<u>UNIT:</u> Using Computer Applications -Word Processing

<u>TIME:</u> 1 week, 2 classes per week to include 1 hour of lecture and 2 hours of lab per class for a total of 6 hours.

GOALS:

- 1. Provide students with the knowledge and skills to create, format, and edit professional documents using word processing software.
- 1. Teach students to use the many sophisticated functions in a word processing application.
- 2. Develop the student's skills to insert graphics into professional documents.

RATIONAL FOR UNIT:

The use of computers to perform word processing functions has changed the way that information is being delivered. The purpose of this unit is to provide students with the knowledge and skills to communicate effectively in the learning environment using the standard software applications. A working knowledge of microcomputer software, fundamentals, and applications will allow the student to create templates in word

processing. This will provide the student with the skills to complete repetitive tasks allowing the student to manage time more efficiently in the workplace and the educational environment.

OBJECTIVES FOR UNIT:

At the end of the class, using Microsoft software, the student will be able to:

- 1. Create, edit, save, and print documents.
 - 1. Use special formatting features in Microsoft Word.
 - 2. Add clipart and enhancements to Word documents.
 - 3. Create professional documents using Microsoft Word.

POSSIBLE UNIT ACTIVITIES:

- 1. Use word processing to create a business letter, a resume, and a short story essay.
- 2. Revise a business letter, a resume, and a short story using the various functions of word processing software.
- 3. Add clipart and enhancements to a short story essay.
- 4. Print finished Word documents.

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REFERENCES:

Microsoft Office 2000 Simplified, MaranGraphics Marangraphics Inc. Format: Paperback, 1st ed., 385pp. ISBN: 0764560522, Publisher: IDG Books Worldwide,

Pub. Date: January 1999

<u>UNIT:</u> Using Computer Applications - Spreadsheets

<u>TIME:</u> 2 weeks, 2 classes per week to include 1 hour of lecture and 2 hours of

lab per class for a total of 12 hours.

GOALS:

1. Provide students with the knowledge and skills to create a spreadsheet to solve mathematical and technical problems.

- 1. Teach students to insert mathematical functions into cells.
- 2. Develop the student's creative skills to format a spreadsheet into a professional document.
- 4. Print a finished spreadsheet document.

RATIONAL FOR UNIT:

The use of computers to solve technical problems with spreadsheets provides students with the ability to manipulate data and develop professional documents. The purpose of this unit is to provide students with the knowledge and skills to communicate effectively in the learning environment using the standard software applications. A working knowledge of microcomputer software, fundamentals, and applications will allow the student to create templates in spreadsheets. This will provide the student with the skills to complete repetitive tasks allowing the student to manage time more efficiently in the workplace and the educational environment.

OBJECTIVES FOR UNIT:

At the end of the class, using Microsoft software, the student will be able to:

- 1. Create, edit, save, delete, and print spreadsheets.
- 2. Add and edit formulas, labels, values, and absolute references to cells in a spreadsheet.
- 1. Create and edit charts.
- 2. Print a spreadsheet file.

POSSIBLE UNIT ACTIVITIES:

- 1. Develop a spreadsheet that includes charts.
 - 2. Manipulate a spreadsheet by adding formulas, labels, values, and absolute references.
- 3. Format a spreadsheet for printing.

REFERENCES:

See the Unit on Using Computer Applications -Word Processing.

<u>UNIT</u>: Using Computer Applications - Presentation Applications

<u>TIME:</u> 2 weeks, 2 classes per week to include 1 hour of lecture and 2 hours of

lab per class for a total of 12 hours.

GOALS:

- 1. Teach students to produce a computer generated Presentation.
- 2. Develop the student's skills in using clipart in Presentation slides.
 - 3. Provide the student with the skills and knowledge to use a computer generated Presentation effectively in the classroom.

RATIONAL FOR UNIT:

The use of computers to teach classes with Presentations software enhances the method of instructional delivery in the classroom. The purpose of this unit is to provide students with the knowledge and skills to communicate effectively in the learning environment using the standard software applications. A working knowledge of microcomputer software, fundamentals, and applications will allow the student to create templates in Presentations software. This will provide the student with the skills to enhance the deliver of instruction allowing the student to manage time more efficiently in the workplace and the educational environment.

OBJECTIVES FOR UNIT:

At the end of the class, using Microsoft software, the student will be able to:

- 1. Create, edit, print, and display Presentations.
- 2. Insert clipart, animations, and enhancements to a Presentation.
- 3. Provide classroom instruction using Presentations software.

POSSIBLE UNIT ACTIVITIES:

- 1. Create, edit, and display a slide Presentation.
- 2. Revise a Presentation by adding clipart, animations, and enhancements.
 - 3. Do a five minute educational Presentation on what the student learned in this class.

REFERENCES:

See the Unit on Using Computer Applications -Word Processing.

UNIT: Integrating Applications into Instruction and Curricula.

<u>TIME:</u> 2 weeks, 2 classes per week, 3 hours per night for a total of 12 hours of lecture.

GOALS:

- 1. Identify uses of the Microsoft Applications in curriculum development and presentation.
- 2. Recognize the opportunities and uses of the software applications for your educational institution.

RATIONAL FOR UNIT:

With so many software applications available, teachers and administrative college staff can utilize these options to promote their educational resources and to also save time. The use of various software applications in curriculum can be used to enhance the teaching and learning processes. Integrating software applications into curriculum provides an opportunity for students to become proficient in the use of technology.

OBJECTIVES FOR UNIT:

At the end of the class, Integrating Applications into Curriculum, the student will be able to:

- 1. Use the methods learned during the sections on Word, Spreadsheets, and Presentations combined with the knowledge learned in this unit to be able to publish their own computerized curriculum.
- 2. Be able to teach their students how to utilize the software applications to perform assignments in their class.
- 3. Be aware of the capabilities that various software applications offer to overcome student disabilities.
- 4. Perform time management activities using various software applications.

POSSIBLE UNIT ACTIVITIES:

- 1. Have students to create a proposal for integrating the software applications into their curriculum or classroom using all the information that was learned in this unit and the sections on Word, Spreadsheets, and Presentations Applications.
- 2. Develop a plan for improving the use of software applications in their administrative work or for their educational institution.

REFERENCES:

<u>Integrating Technology into the Curriculum</u>, <u>Barbara Thorson</u>. **Format:** Paperback, **ISBN**: 1576901882, **Publisher:** Teacher Created Materials, Inc., **Pub. Date:** March 1998.

UNIT: Using the Internet

<u>TIME:</u> 1 week, 2 per week to include 1 hour of lecture and 2 hours of lab per

class for a total of 6 hours.

GOALS:

- 1. Explain the uses of the Internet and the basic Internet terminology.
- 2. Utilize search engines.
- 3. Employ tools and commands on the Internet.
- 4. Set up an email account, and send and receive email.
- 5. Produce Web Sites.
- 6. Demonstrate the features of a web browser.

RATIONAL FOR UNIT:

The Internet offers a lot of opportunities to students and educational institutes that were not once available. The Internet is so widely used in the business environment that in order for a student to be successful they must understand how the Internet works and be able to utilize its functions and capabilities. The Internet can also be a big time saver. For example, a great deal of research can now be performed on the Internet, which once required spending hours in a library. It also serves as a cost-effective source of communication that is instantaneous. The Internet is also widespread in its reaching and is widely used. It offers opportunities to educational institutes to reach a new market of student that it would not have been able to reach by using online courses.

OBJECTIVES FOR UNIT:

At the end of the class, using the Internet, the student will be able to:

- 1. Realize and understand the limitations of the Internet.
- 2. Utilize the toolbar and its functions.
- 3. Utilize search engines for research.

- 4. Recognize and use the major Internet terminology.
- 5. Develop a web page.
- 6. Send and receive e-mail.
- 7. Be able to utilize discussion pages.

POSSIBLE UNIT ACTIVITIES:

- 1. Lecture on the uses and limitations of the Internet.
- 2. Assignments to complete using the Internet toolbar.
- 3. Use search engines to locate information for research.
- 4. Set up an email account and receive and send e-mail.
- 5. Designing a web page and post it to the Internet.
- 6. Participate in an online class discussion page.

REFERENCES:

McLaren, Bruce. Understanding and Using the Internet. (1996) Edition 2.

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<u>UNIT:</u> Integrating the Internet into Instruction and Curricula

<u>TIME:</u> 2 weeks, 2 classes per week to include 6 hours of lecture and 6 hours of lab.

GOALS:

- 1. Identify uses of the Internet in curriculum development and presentations.
- 2. Recognize the opportunities and uses of the Internet for your educational institution.

RATIONAL FOR UNIT:

With so many options available through the Internet, teachers and administrative college staff can utilize these options to promote their educational resources and to also save time. Students today are very different than the students of twenty years ago. Many college students today are older, working students. These issues limit their educational choices. Using the Internet in curriculum can help these students to overcome these limits.

OBJECTIVES FOR UNIT:

At the end of the class, integrating the Internet into curriculum, the student will be able to:

- 1. Recognize the opportunities that the Internet provides them to overcome student issues such as time and place restraints.
- 2. Use the methods learned during the section on Using the Internet combined with the knowledge learned in this unit to be able to publish their own curriculum on the Internet.
- 3. Recognize the potential of the Internet as a research tool and recognize when the information found on the Internet should and should not be used.
- 4. Be able to use email and be familiar with Intranet, Email, and how the use of a college web site can be used in administrative tasks to save time.
- 5. Be able to teach their students how to utilize the Internet and its capabilities to perform assignments in their class.
- 6. Be aware of the capabilities the Internet offers to overcome student disabilities.
- 7. Perform time management activities using the Internet.

POSSIBLE UNIT ACTIVITIES:

- 1. Have students create a proposal for integrating the Internet into their curriculum or classroom, and administrative work using all the information that was learned in this unit about integrating the Internet into curriculum.
- 2. Develop a plan for improving the use of the Internet in their administrative work or for their educational institution.

REFERENCES:

Barron, Ann E & Ivers, Karen S. <u>Internet and Instruction: Activities and Ideas</u>. (1998) Edition 2

CURRICULUM EVALUATION

STUDENT EVALUATION - SAMPLES

Weekly assignment examples and evaluation for the unit on Using Computer Applications - Word .

Objective: The goal of this unit is to provide the student with a working knowledge of word processing functions.

Procedure: The first hour of each class will be used to lecture on four tutorials as follows:

- 1. Create, edit, save, and print professional documents.
- 2. Use special formatting features in Word documents.
- 3. Add clipart and graphics to Word documents.
- 4. Set up letterhead graphics on Word documents.

Each class will consist of two hours of laboratory with hands-on instruction.

WORD PROCESSING EXAM

The final exam will consist of the following:

The student will design an Invitation to Bid for office supplies for the ABC Company. The project will require students to set up letterhead for the ABC Company and prepare a business cover letter for the proposal. The proposal will require the student to insert graphics, clipart, and tables into the documents. This project will require planning, building, testing, designing, using various functions and charts, inserting letterhead graphics, and formatting and printing the letter and proposal.



Letter Sample Proposal Sample

Weekly assignment examples and evaluation for the unit on Using Computer Applications - Spreadsheets.

Objective: The goal of this unit is to provide students with the knowledge and skills to plan, build, test, and document worksheets. The students will progress to more advanced features such as using formulas, functions, autoformat, and charts.

Procedure: The first hour of each class will be used to lecture on four tutorials as follows:

- 1. Using worksheets to Make Business Decisions
 - 2. Planning, Building, Testing, Designing, Formatting, and Printing a Worksheet
- 1. Using Functions, Formulas, and Absolute References in Spreadsheets
- 2. Using Charts and Graphics in Spreadsheets

Each class will consist of two hours of laboratory with hands-on instruction.

SPREADSHEET EXAM

The final exam will consist of the following:

The student will design a spreadsheet for the Monthly Inventory of Supplies for the ABC Company. The project will require students to set up an inventory for various office supplies. The column requirements will include an item description, number on hand, number ordered during the month, number distributed during the month, ending balance, and value of inventory on hand. This project will require planning, building, testing, designing, and using various functions and charts, inserting mathematical formulas, inserting letterhead graphics, and formatting and printing the inventory report.

ABC Company, Inventory Supply Report for Month Ending July 2000							
Item Description	Number on Hand	Number Received	Number Distributed	Ending Balance	Value of Inventory on Hand		
Totals							

Sample Report

DOCUMENT VALIDATION - LETTER AND SURVEY LETTER OF TRANSMITTAL FOR CONTENT VALIDITY SURVEY

Jenny Buchanan

Nancy Sexton

845 Grayson Road

Wytheville, VA 24382

David N. Johnson, Director of Continuing Education

Wytheville Community College

1000 East Main Street

Wytheville, VA 24382

Dear Dr. Johnson:

The rapid changes in technology have created the need for teachers and trainers to become literate in the use of technology for educational purposes. We have developed a curriculum in an effort to address this need. The curriculum is intended to provide basic computer competencies to equip teachers and trainers with the knowledge to tackle new applications without hesitation, and assess the educational potential of new technologies. It also provides the student with the skills to successfully integrate computer hardware and software into course curricula.

Your evaluation of the curricula will assist with the development of a program that will help teachers and trainers learn the appropriate computer competencies. Upon completion of the following questions, please mail the form to the above address.

We appreciate your time and effort in assisting us with this project. Returning the completed evaluation before September 1, 2000, will provide time for the curriculum to be modified before application in the Spring 2000 semester. Should you have questions concerning the curriculum, please feel free to contact us at (540) 223-4780. Thank you in advance for your help.

Your time and cooperation are greatly appreciated.

Sincerely,

Jenny Buchanan

Nancy Sexton

TECHNOLOGY LITERACY FOR TEACHERS AND TRAINERS COURSE CONTENT VALIDITY SURVEY

Upon completion of this curriculum, would the student possess the necessary skills to:

Windows

- 1. Format and copy disks? Yes No.
- 2. Operate menus? Yes No.

3. Copy, save, and delete files? Yes No .

Word Processing

- 4. Create, edit, save, and print documents? Yes No.
- 5. Use special formatting features? Yes No .
- 6. Add clipart and enhancements to documents? Yes No .

Spreadsheets

- 7. Create, edit, save, and print spreadsheets? Yes No.
- 8. Add formulas and functions to spreadsheets? Yes No.
- 9. Create and edit charts? Yes No.

Presentations

- 10. Create, edit, and print a presentation? Yes No.
- 11. Display a presentation? Yes No.
- 12. Add clipart, animations, and enhancements to Yes No.

a presentation?

Internet

- 13. Use an Internet browser? Yes No.
- 14. Perform search functions on the Internet? Yes No.
- 15. Use email? Yes No.

Integration

- 16. Use computers in the classroom? Yes No.
- 17. Use software applications in the classroom? Yes No.
- 18. Integrate computers and software into existing Yes No.

courses?

19. What changes could be made to the curricula content better to meet the aim and objectives? .

20. Is the content conducive for learning? Yes No . If No, explain.

21. Do any units need to be removed, revised, or added? Yes No . If Yes, explain.

22. If you answered No to any one of the questions numbered 1 through 18, please explain.

Appendix A

Sample Course Outline

Technology Literacy Course for Teachers and Trainers

Course Description

This course provides a working introduction to computers, microcomputer software, fundamentals, applications, the Internet, and technology integration. The instruction includes computer operation, operation systems, word processing, spreadsheets, presentations, Internet, and technology integration.

Course Focus

The course will use Windows 98, Microsoft Office 2000, and the Internet to teach the student to use the computer, an integrated office software package, and the Internet. Word, Excel, PowerPoint, and the Internet will be used to create and edit documents. Lecture will be used to provide the student with the knowledge and skills to integrate technology into course curriculum.

Text and References

<u>How to Use Computers:</u> Visually in Full Color, <u>Lisa Biow</u>. **Format:** Paperback, **ISBN:** 0789716453, **Publisher:** Que, **Pub. Date:** June 1998.

Microsoft Office 2000 Simplified, MaranGraphics Marangraphics Inc. Format: Paperback, 1st ed., 385pp. ISBN: 0764560522, Publisher: IDG Books Worldwide, Pub. Date: January 1999.

Integrating Technology into the Curriculum, Barbara Thorson. Format: Paperback, ISBN: 1576901882, Publisher: Teacher Created Materials, Inc., Pub. Date: March 1998.

McLaren, Bruce. Understanding and Using the Internet. (1996) Edition 2.

Course Goals

At the end of the class, the student will:

Have a better understanding of the history and evolution of technology, and understand today s uses and requirements for technology.

Understand the attitudes and fears, and the impact of computers on society. Learn techniques to overcome the fear of using technology.

Know the basic computer hardware and possess a working knowledge of the Windows Operating System.

Have a working knowledge of word processing and the many features available in a word processing package.

Have a working knowledge of spreadsheets and the many features available in a

spreadsheet package.

Have a working knowledge of presentations and the many features available in a

presentations package.

Have a working knowledge of the Internet and it's many uses.

Possess the basic skills and knowledge to integrate applications and the Internet into curricula.

Student Contributions

Each student will spend time each week preparing for class. Attendance is critical

because of the volume of content presented in each class. The student will be expected to complete exercises assigned by the instructor. Late assignments will not be accepted unless the student receives prior approval from the instructor.

Course Evaluation

The course will be evaluated on the basis of completed homework and in class assignments, projects, and presentations. There is a possible 600 points and grades will be as follows:

$$A = 600 - 540$$

$$B = 539 - 480$$

C = 479 - 420

D = 419 - 360

F = 359 & below.

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