



Information Technology Sequence 3

Code: 8143

MISSOURI INFORMATION TECHNOLOGY

SEQUENCE 3

Test Code: 8143

Version: 01

Computer Applications 50%

Desktop Publishing 25%

Web Design 25%

Specific competencies and skills tested in this assessment:

Computer Applications

Execute Basic Computer Operations

Use program interface (e.g., menu items, ribbons, toolbars, dialog boxes)

Manage and transfer files

Identify file formats and extensions

Perform basic troubleshooting and maintenance

Identify hardware and software specifications to purchase a computer (e.g., RAM, processor, hard drive, software, and price)

Save files to various storage devices (e.g., CDs, USB, hard drive, DVD)

Determine appropriate software applications for tasks

Construct Business Documents using Word Processing Applications

Create and format business documents (e.g., letters, memos, outlines, newsletters, and reports)

Set printer specifications

Proofread and edit documents

Manipulate the features of word processing software to enhance documents (e.g., headers, footers, tabs)

Create and format tables

Create mail-merge documents

Insert and manipulate graphics

Create documents using templates

Prepare envelopes and labels

Illustrate the use of enhancement features (e.g., borders, lines, shading, bold, bullets)

Demonstrate use of automatic features (e.g., AutoCorrect, spell-check, thesaurus)

Missouri Information Technology – Sequence 3 (continued)

Construct Business Documents using Spreadsheet Applications

Create, design, and edit spreadsheets
Create basic formulas with addition, subtraction, multiplication, and division
Format cell, column, and row contents (e.g., font, color, alignment, shading, decimal)
Format columns and rows
Use basic functions/formulas (e.g., auto sum, average, IF)
Create, format, and edit charts and graphs
Interpret and organize spreadsheet data (e.g., sort and filter)
Set print specifications for formulas, graphs, worksheets, etc.
Use relative and absolute cell references

Construct Business Documents using Database Applications

Create and manipulate a database
Process material using database features (e.g., sort, filter, and merge)
Distinguish between different field types (e.g., text, numeric)

Construct Business Documents using Presentation Applications

Create, format, and edit presentations
Enhance presentations (e.g., sound, animation, graphics, transitions, and video)
Apply design and layout principles to presentations
Set print specifications for outline, slides, handouts, etc.
Utilize proper presentation etiquette (e.g., number of bullets, lines, words, and notes)
Integrate input from various software applications

Explore the Internet and Online Classroom Portals

Demonstrate principal usages of online communication (e.g., upload, download, attaching files)
Identify copyright principles (e.g., public domain, copy protection, licensing)
Evaluate Internet resources

Desktop Publishing

Discuss Foundational Concepts

Identify and apply tools and palettes.
Explain copyright issues related to graphic arts/desktop publishing (e.g., legal, ethical)
Demonstrate sensitivity to bias (e.g., culture, gender, age)
Plan a preliminary layout for a publication using manual or digital tools
Develop a work schedule to meet deadlines
Use correct grammar, punctuation, and spelling

Perform Publication Layout

Set appropriate page layout options (margins, columns, double-sided, facing pages, page numbering)

Missouri Information Technology – Sequence 3 (continued)

Demonstrate Typography Concepts

Compose text (e.g., headings, captions, body text)

Import text files and other word processing documents into publications

Explain the usage of font types (e.g., serif, sans serif, decorative)

Manipulate text features and formats (e.g., wordwrap, hyphenations, drop cap, color, gradient, text path)

Manage Images Appropriately

Create images

Determine appropriate image file formats (e.g., bmp, tiff, jpeg, gif, pict, eps)

Demonstrate Design Concepts

Plan the proper use of white space

Apply the proper use of color

Create an effective focal point (e.g., primary, secondary)

Create appropriate headlines

Position captions

Apply design principles (e.g., movement, balance, symmetry)

Apply layering techniques in publications

Match the design to the appropriate audience

Create Business Promotional Materials

Create a flyer and advertisement

Create stationery sets (e.g., labels, business cards, notepads, invoices, letterhead)

Create multi-page, multi-column documents (e.g., newsletters, magazines, menus, programs)

Create brochures (single/multiple)

Create promotional items (e.g., CD covers, T-shirts, bumper stickers)

Perform Print Process

Use print preview or WYSIWYG layout before printing

Select an appropriate printer and printer attributes (e.g., duplexing, tray size, paper size)

Convert desktop publication to format for exporting/Web posting (e.g., PDF, HTML)

Develop a Portfolio

Explain ways portfolios can be used

Missouri Information Technology – Sequence 3 (continued)

Web Design

Apply Introductory Principles

Explain how resolution affects Web page creation

Design an Effective Website

Define Web page design principles and elements

Evaluate Websites based on design elements and principles (e.g., alignment, color, navigation, user feedback)

Plan an organized layout

Select an appropriate navigational structure

Use Web-safe colors and fonts

Employ proofreading and editing techniques

Apply Web accessibility standards

Demonstrate Image Creation and Manipulation Skills

Recognize the different image types and their extensions (e.g., gif, jpg)

Use layering techniques in image editing program to better manage images (e.g., ordering, arranging, naming)

Optimize an image to improve load time

Demonstrate Page Creation Skills

Use Web authoring software to create Web pages

Identify and apply HTML tags and attributes for basic Web page design (e.g., title, metadata, table, link)

Create and use a template

Apply Effective Web Page Management Techniques

Organize all content files into folder management

Create meta tags to be utilized by a variety of search engines

Apply copyright laws in all Web-related projects

Use Advanced Web Creation Techniques

Create interactive design elements (e.g., rollover, swap image, slideshow)

Use Cascading Style Sheets (CSS) to control page elements (e.g., external, internal, inline)

Missouri Information Technology – Sequence 3 (continued)

Written Assessment:

Administration Time: 3 hours

Number of Questions: 151

Areas covered:

50%	Computer Applications
25%	Desktop Publishing
25%	Web Design

Sample Questions:

To navigate to the next cell horizontally and then vertically in a word processing table, press the _____ key.

- A. tab
- B. enter
- C. alt
- D. command

Which of the following can be printed using presentation software?

- A. queries
- B. CD covers
- C. forms pages
- D. notes pages

Which of the following fields would be considered a text data type?

- A. (231) 555-1212
- B. \$137.89
- C. 3/2/2013
- D. 24

Converting information from one program to another is called

- A. importing
- B. exporting
- C. copying and pasting
- D. cutting and pasting

Two types of hyperlinks are

- A. internal and external
- B. inside and outside
- C. primary and secondary
- D. private and public