
Prepared by the Department of Business

Date of Departmental Approval: November 27, 2023

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Effective: Fall 2024

1. **Course Number:** BST110
Course Title: Computer Applications
2. **Description:** Students learn how to use a Windows-based personal computer in various business settings. A lab/lecture environment is used to enable students to learn the Windows operating system and Microsoft Office for word processing, spreadsheets, databases, and presentation graphics. Students are introduced to the software and then progress through various challenging assignments, including integrating applications. Basic concepts in Internet usage, including electronic mail, are an integral part of the course. **Students enrolled in this course are expected to enter with the ability to type 30 wpm accurately.**
3. **Student Learning Outcomes:** Upon successful completion of this course, students can do the following:
 - ♦ Demonstrate use of personal computers.
 - ♦ Demonstrate use of the Windows operating system.
 - ♦ Demonstrate appropriate file management skills and file transfer between various platforms, including network and cloud storage.
 - ♦ Use the Internet for research and electronic mail.
 - ♦ Use standard business English in all email and written communication.
 - ♦ Demonstrate use of word processing software effectively to produce documents such as business letters, memos, and a research paper.
 - ♦ Demonstrate use of spreadsheet software effectively to produce worksheets using formulas and functions and to produce charts.
 - ♦ Create an original presentation using presentation graphics software effectively to assist with oral presentations.
 - ♦ Demonstrate use of database software to produce tables, queries with logical operators, reports, and forms.
 - ♦ Integrate various software programs.
 - ♦ Evaluate and select appropriate software packages to accomplish specific tasks.
4. **Credits:** 3 credits
5. **Satisfies a General Education Requirement:** General Education Elective (Interdisciplinary Studies)
6. **Prerequisites:** None
7. **Semester(s) Offered:** Fall, Spring, and Summer
8. **Suggested General Guidelines for Evaluation:** The course grade is based on an evaluation of lab assignments, examinations, hands-on projects, and a final exam.
9. **General Topical Outline (Optional):** See attached competencies.

BST110 Computer Applications Course Competencies

Essential Computer Concepts

Describe the components of a microcomputer system in a networked environment.
Define microcomputer hardware in terms of its functions: input, output, processing, and storage.
Describe how peripheral devices are connected to a microcomputer.
Define computer software in terms of its functions: application software and system software.
Describe types of application software and their functions.
Identify the factors to evaluate when purchasing a personal computer system (hardware and software).
Describe information networks.
Describe security and legal issues associated with a computer.
Describe health, safety, and ergonomic factors involved in using a computer.
Describe cloud storage.

Windows Operating System

Start and shut down Windows.
Identify the objects on the Windows desktop.
Perform the basic mouse operations: point, click, right-click, double-click, drag, and right-drag.
Identify and use the controls in a window.

- Open, minimize, maximize, restore, and close a window.
- Move and resize a window on the desktop.

Identify and use Windows components: taskbar, menus, toolbars, list boxes, scroll bars, option buttons, tabs, and check boxes.
Demonstrate keyboard shortcut notation.
Demonstrate use of the Windows help system.
Demonstrate file management techniques:

- Identify the elements of windows.
- Explain the concept of file, folders, and shortcuts.
- Use File Explorer to view the list of files on a disk and change view options.
- Open, save, print, and close files.
- Save documents using different names and file formats.
- Move, copy, delete and rename a file or folder.
- Select and manipulate groups of files.
- Navigate through devices and folders using navigation buttons.
- Identify and set file and folder properties.
- Create and delete shortcuts to a drive, a document, and a printer.
- Compress files/folders and extract zipped files.

Create and modify taskbar toolbars.
Change the desktop appearance.
Describe plug and play.
Describe types of system software and their functions.
Explain and use virus scanning software.
Demonstrate use of the Control Panel to access system settings:

- Add/remove hardware and software.
- Manage printers.
- Display and set hardware settings (mouse, display, system, accessibility options, devices, etc.).

Internet

Describe the Internet and World Wide Web.
Define basic Internet terminology.
Demonstrate use of popular browsers and search engines to browse the Web.
Complete web-based forms.
Demonstrate use of electronic mail:

- Compose emails
- Reply and forward emails.
- Set up an email distribution list.
- Send and download attachments.
- Set up an Out-of-Office reply (automated reply).
- Organize email messages
- Explain security and privacy issues related to using email.
- Set up a signature.

Integrated Office Applications

Identify and describe the programs that comprise the application suite.

Explain the benefits of integrating data between programs.

Start, exit, and switch between suite programs.

Use ribbons.

Use task panes.

Demonstrate use of smart tags.

Demonstrate use of the Help system.

Identify common components (i.e. spell checker, printer setup, inserting clip art).

Word Processing

Start and exit the word processing program

Identify the components of the word processing window.

Demonstrate the views of the document window.

Open, save, and close documents.

Work with more than one open document.

Navigate in the document window.

Insert, modify, and move text.

Cut, copy, paste, and paste special using the Office Clipboard.

Demonstrate use of AutoText, AutoComplete, and AutoCorrect.

Apply and modify text formats.

Correct spelling and grammar usage.

- Demonstrate use of the Spelling and Grammar Checker
- Demonstrate use of the Thesaurus

Apply font and text effects.

- Change font size, face, and styles.
- Apply character effects (superscript, subscript, strikethrough, small caps, etc.).
- Highlighting text.

Copy formats using Format Painter.

Enter and format date and time.

Apply character and paragraph styles.

Find and replace text.

Demonstrate use of the Undo, Redo, and Repeat commands.

Insert breaks (page break and section break).

Apply accessibility features to Word objects.

Modify paragraph formats.

- Align text in paragraphs (center, left, right, and justified).
- Add (and modify) bullets and numbering.
- Set character, line, and paragraph spacing options.
- Use indentation options (left, right, first line, and hanging indent).
- Use text flow options (keeping lines together).

Create and modify headers and footers.

Insert, create and modify page numbers.

Use Page Setup options (page orientation, margins, header and footer options, etc.)

Modify document layout and page setup options.

Preview and print documents, envelopes, and labels.

Create documents using templates.

Create and manipulate PDF documents from Word documents

Create and modify tables.

- Create and format tables.
- Add borders and shading to tables.
- Revise tables (insert and delete rows/columns, change cell formats).
- Modify table structure (merge cells, change row height and column width).
- Repeat rows as headers.
- Prevent rows from breaking across pages.

Create desktop publishing documents:

- Insert and edit images and graphics.
- Format columns.
- Apply appropriate formatting (balance text between columns, drop cap, etc.).

Spreadsheets

Start and exit the spreadsheet program.

Describe how spreadsheets are used in business.

Identify the components of the worksheet window.

Demonstrate the views of the worksheet window.

Open, save, print, and close workbooks.

Navigate a workbook and worksheet.

Plan, build, and test a worksheet.

Enter text, values, formulas, and functions into a worksheet.

Edit and revise worksheets:

- Edit cell content.
- Insert and delete selected cells.
- Cut, copy, paste, paste special, and move selected cells.
- Use Find and Replace.
- Clear cell contents, formats, and comments.
- Work with series (AutoFill).
- Edit and revise formulas (in a cell, use the address bar, use absolute and relative references)

Use templates to create new workbooks.

Format worksheets:

- Apply font styles (typeface, size, color, and styles).
- Apply number formats (currency, percent, dates, and commas).
- Modify row and column size.
- Modify alignment of cell content.
- Rotate text and change indents.
- Use the Format Painter.
- Apply AutoFormat.
- Apply cell borders and shading.
- Merge cells.

Modify Page Setup options.

- Preview and print worksheets and workbooks.
- Print a selection.
- Change page orientation and scaling.
- Set page margins and centering.
- Insert and remove a page break.
- Set and clear print areas.
- Set and edit headers and footers.
- Set print titles and options (gridlines, print quality, row and column headings).

Insert and delete rows and columns.

Hide and unhide rows and columns.

Freeze and unfreeze rows and columns.

Move between worksheets in a workbook.

Demonstrate use of the Spell Checker.

Rename a worksheet.

Insert and delete worksheets.

Move and copy worksheets.

Insert and edit functions.

- Use AutoSum.
- Use the Paste Function to insert a function.
- Use basic functions (Statistical – AVERAGE, SUM, COUNT, MAX, and MIN)
- Use date functions (NOW and DATE)

Use Charts and Objects

- Use the Chart Wizard to create a chart.
- Preview and print charts.
- Modify charts.
- Insert, move, and delete an object (graphic).

Databases

Start and exit the relational database program.

Describe how databases are used in business.

Identify the components of the database window.

Create and use tables.

Change field properties in tables.

Create table relationships.

Sort records.

Filter records.

Query a database using the select query window.

Create and print reports.

Create and use forms.

Presentations

Start and exit the presentation program.

Identify the components of the presentation window.

Understand the views of the presentation window.

Open, save and close presentations.

Create a presentation.

- Create a blank presentation.
- Create a specified type of slide.
- Create a presentation from a template or a wizard.
- Navigate among different views.
- Create a new presentation from existing slides.
- Copy a slide from one presentation into another.
- Insert headers and footers.

Modify a presentation.

- Change the order of slides using Slide Sorter view and in the outline pane.
- Find and replace text.
- Change the layout for one or more slides.
- Modify the Slide Master.
- Apply a design template.
- Modify text in a presentation.
- Insert Clip Art.
- Apply custom animation.

Print speaker notes and audience handouts.

Deliver a presentation.

Integrating Applications Software

Insert object – art or organization chart into a Word document.

Create a presentation from a word processing document.

Use Object Linking and Embedding (OLE).

Copy and move between programs, including the Web.