

Strands & Standards

COMPUTER TECHNOLOGY 2



COURSE DESCRIPTION

This course applies advanced concepts and principles using word processing, spreadsheets, databases, and electronic presentation software. Students will integrate applications learned. This course builds on skills included in Computer Technology.

License

CTE/Secondary

Related Endorsements

Business and Marketing

Information Technology

Intended Grade Level: 10 – 12

Units of Credit: 0.5

Core Code: 32.02.00.00.216

CE Core Code: 32.02.00.13.216

Prerequisite: Computer

Technology, or obtain IC3 Test

Skill Certification: 251

Test Weight: 0.5

Strands & Standards

STRAND 1

Students will apply features in a variety of applications.

Standard 1: Identify and change default settings.

Standard 2: Identify and customize screen components (toolbars, ruler, status bar, document window, task pane, etc.) in each application.

Standard 3: Graphic Objects (examples: clipart, pictures, WordArt, drawing tools, text boxes).

- Change size
- Text wrapping
- Borders and shading
- Rotate

Standard 4: Headers and footers, spell check, zoom and view, format painter.

Performance Objective: Use the following features in at least two software applications.

- Graphic objects
- Headers and footers

STRAND 2

Students will build on word processing skills to create and edit documents using advanced features.

Standard 1: Review word processing skills learned in Computer Technology. (see Standards and Objectives for Computer Technology Standard 0000-03)

Standard 2: Tables

- Create
- Insert and delete rows/columns
- Merge and split cells
- Enhance appearance with borders and shading/color
- Sort data

Standard 3: References.

- Hanging indent
- Footnotes/Endnotes
- Bibliography/work cited
- In-text citations

Standard 4: Formatting and Page Layout

- Section and page breaks
- Headers and footers
- Page numbering
- Columns
- Tabs
- Apply and modify styles

Standard 5: Mail Merge

- Create a data source

- Create a main document and insert merge fields
- Merge a main document and data source

Performance Objectives: Use word processing software to create:

- Reports that include
 - page numbers, header or footer, section/page break(s),
 - in-text citations, footnotes/endnotes, and works cited/bibliography.
- Table with merged/split cells, borders and shading, and sorted data (this table may be included in reports, letters, etc.).
- Mail merged letter with envelopes or labels

STRAND 3

Students will build on spreadsheet skills to create and edit worksheets.

Standard 1: Review spreadsheet skills learned in Computer Technology (see Strands and Standards for Computer Technology Standard 0000-04)

Standard 2: Formatting and Layout

- Cell alignment (horizontal, vertical, rotate, wrap text, merge cells)
- Number formatting
- Conditional formatting
- Insert, move, delete, and copy portions of a worksheet
- Apply and modify styles
- Change page orientation
- Freeze panes and split window
- Manipulate worksheet tabs (insert, rename, delete, move, color, etc.)
- Fill data in a row or column (formulas, series, etc.)

Standard 3: Formulas and Functions

- Create formulas
- Relative and absolute cell references
- Functions: MAX, MIN, COUNT, IF, VLOOKUP, HLOOKUP

Standard 4: Charts

- Create charts to appropriately represent data (pie, bar, column, line, etc.)
- Place chart as an object in current worksheet or in a new sheet
- Format chart elements (legends, titles, borders, fill, etc.)

Standard 5: Database Features

- Sort in ascending/descending order and by multiple fields
- Define and apply filters
- Subtotals
- Lists

Standard 4: Printing

- Fit worksheet to specified number of pages (scaling)
- Formulas
- Gridlines and row/column headings
- Selection of cells
- Multiple sheets
- Repeat rows and/or columns

Performance Objectives: Use spreadsheet software to create:

- Workbooks (with two or more worksheets) that include:
 - references to other worksheet cells in the workbook
 - formulas with absolute and relative cell references
 - functions including IF, PMT, VLOOKUP, and HLOOKUP
 - print options including formulas, gridlines, row/column headings, scaling

- Charts
 - pie, bar, column, line, etc.
 - formatted
- Worksheet with database features o Sort on multiple fields
 - Filter
 - Subtotals

STRAND 4

Students will build on electronic presentation skills to create and edit slide shows.

Standard 1: Review presentation skills learned in Computer Technology 1 (see Standards and Objectives for Computer Technology Standard 0000-08)

Standard 2: Create and Modify

- Apply appropriate design principles (professional business presentation)
- Customize slide master
- Apply custom animation and transitions
- Insert objects (clipart, picture, table, chart, diagram, sound, and video)
- Insert hyperlinks and action buttons
- Add speaker notes to slides

Standard 3: Presenting a Slide Show

- Print handouts, speaker notes, and outlines
- Oral presentation skills

Performance Objectives: Use presentation software to create:

- Slide shows, demonstrating professional quality design following generally accepted presentation guidelines that include:
 - Transitions with automatic timing
 - Custom animations
 - Objects (charts, diagrams, tables, sound, movie)
 - Links and action buttons
- Speaker notes

STRAND 5

Students will acquire database skills to manage data.

Standard 1: Create and Manage Tables

- Define databases and database management systems
- Define database terminology (field, record, table, primary key, etc.)
- Create database
- Create and enter data in a table
- Restructure (add and delete fields, change field names and properties, etc.)
- Preview and print

Standard 2: Queries

- Create in design view and using wizard
- Edit (add, delete, move, and hide fields)
- Use criteria (text, wildcard, numeric, compound, and comparison operators)
- Sort
- Change field properties
- Preview and print

Standard 3: Reports

- Create using wizard
- Preview and print

Performance Objective: Complete a project that combines the use of word processing, spreadsheet, and electronic presentation software.

STRAND 6

Students will integrate word processing, spreadsheet, and electronic presentation software.

Skill Certificate Test Points by Strand

Test Name	Test #	Number of Test Points by Strand										Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10		
Computer Technology 2	251	28	36	11								75	42