**TENNESSEE COMPUTER TECHNOLOGY: RESEARCH AND DEVELOPMENT STANDARDS**

**PAGE(S) WHERE TAUGHT**
(If submission is not a text, cite appropriate resource(s))

<table>
<thead>
<tr>
<th><strong>Computer Productivity Applications</strong></th>
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**Course Description:**

This course is designed to develop skills needed to use computer software for business and personal use. Emphasis is given to, but not limited to four major applications: word processing, database, spreadsheet and presentation design. Students will use the tools of the electronic desktop in completing applications. Skills developed will facilitate efficient production, accurate analysis, management of information and oral and demonstrative presentation skills. (This course requires a computerized workstation for each student with word processing, database, spreadsheet and presentation resident software.)

**Standard 1.0**

The student will evaluate the impact of computers have on societal change.

**Learning Expectations**

The student will:

1. **1.1** Analyze the impact of computer technology on individual lives and the business world.  

2. **1.2** Explore emerging computer technologies.  
   **SE:** 234-239, 240-245, 246-251, 252-255, 256-261, 262-265, 266-270, 271-278, 279-293, 294-305

3. **1.3** Analyze different types of computer applications and the types of tools needed to complete each.  

SE = Student Edition  
TE = Teacher Edition  
TR = Teaching Resource  
TECH = Technology
### TENNESSEE COMPUTER TECHNOLOGY: RESEARCH AND DEVELOPMENT STANDARDS

<table>
<thead>
<tr>
<th>Performance Standard: Evidence Standard Is Met</th>
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<tbody>
<tr>
<td>The student:</td>
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<tr>
<td>• Compares and contrasts the benefits and limitations of computer technology on society.</td>
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<tr>
<td>• Examines and reports on current trends through the use of videos, Internet, magazines, newspapers, etc.</td>
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#### Sample Performance Task

In assigned work groups research and identify ten ways technology affects each team member daily.

### Standard 2.0

The student will apply skills appropriate to the resident operating system.

#### The student will:

1. **Analyze and illustrate use of operating system commands.**
   - **SE:** iv-vi, 2-4, 5-6

2. **Analyze components and functions of the resident electronic desktop.**
   - **SE:** 2-4, 5-6, 10-12, 15-16, 20-23, 28-30

#### Performance Standard: Evidence Standard Is Met

The student:

- **Demonstrates the features of the resident electronic desktop.**
- **Utilizes the resident electronic desktop environment to:**
  - Format a disk.
  - Analyze the types of files shown in a directory.
  - Interpret the structure of directories.
### Tennessee Computer Technology: Research and Development Standards, Computer Productivity Applications Grades (9-12)

#### TENNESSEE COMPUTER TECHNOLOGY: RESEARCH AND DEVELOPMENT STANDARDS

- Create directories (folders) and sub directories.
- Name files/directory and rename existing files/directory (folders).
- Copy a file to a diskette and copy a file from one directory to another.
- Demonstrates the use of the tools to perform various tasks, such as the “drag” technique to size, resize a window, minimize and restore an icon, maximize, minimize and restore buttons.
- Using the mouse, identifies the “pull-down menus and dialog boxes and illustrates their use.

#### Sample Performance Task

The student will use components and functions of the resident electronic desktop

### Standard 3.0

The student will increase skills of processing documents in various styles, formats and lengths.

#### Learning Expectations

The student will:

3.1 Apply formatting skills to a variety of business documents.


3.2 Use appropriate capitalization, punctuation, number expression rules and editing and proofreading skills to produce mailable documents.

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**Performance Standard: Evidence Standard Is Met**

The student:

- Inputs and formats business documents, such as letters, memos and manuscripts.

- Demonstrates word processing productivity by using appropriate editing skills.

**Sample Performance Task**

The student will compose and format a one-page report entitled “How Computers are used in a Career of Interest.”

**Standard 4.0**

The student will create and design spreadsheets to produce and manipulate alpha/numeric data.

**Learning Expectations**

The student will:

1. **Recognize the advantages of spreadsheet applications.**

2. **Use the functions and identify the terminology of the resident software package and its operating procedures.**

3. **Apply procedures of inputting, editing and formatting cell contents.**

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Performance Standard: Evidence Standard Is Met

The student:

- Creates spreadsheets using appropriate inputting, editing and formatting skills.
- Designs spreadsheet formulas.
- Enhances spreadsheet documents by incorporating graphic elements.
- Sets up print specifications and prints.

Sample Performance Task

- Divide the class into groups of two and have them design and create a spreadsheet with information given concerning a Future Business Leaders of America and/or a Business Professionals of America fundraising activity.

Standard 5.0

The student will develop database skills to organize and maintain information.

Learning Expectations

The student will:

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<tr>
<td><strong>5.3</strong> Apply the procedures for designing and creating a database.</td>
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<tr>
<td><strong>5.4</strong> Apply the procedures for inputting, sorting, searching, editing and updating data.</td>
</tr>
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Performance Standard: Evidence Standard Is Met

The student:

- Creates databases using appropriate inputting, formatting and editing skills.
- Searches and sorts database for specific information.
- Creates and formats database reports.

Sample Performance Task

The student will design a database given specific Future Business Leaders of America and/or Business Professionals of America information.
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<td><strong>Standard 6.0</strong></td>
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<td>The student will examine the efficiency and effectiveness of integrated packages for information processing.</td>
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<tr>
<td><strong>Learning Expectations</strong></td>
<td></td>
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<tr>
<td>The student will:</td>
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<tr>
<td>The student:</td>
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<tr>
<td>• Creates documents integrating word processing, spreadsheet and database information.</td>
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<tr>
<td>• Demonstrates proper formatting skills in assembling integrated documents.</td>
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<td>• Analyzes the use of integrated packages versus stand-alone packages.</td>
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<tr>
<td>• Assesses the value of transfer of learning within integrated software packages.</td>
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**Sample Performance Task**

The student will create a mail-merge letter involving travel plans and expenses to a Future Business Leaders of America or a Business Professionals of America State Leadership Conference.

### Standard 7.0

The student will design a multi-media presentation.

**Learning Expectations**

The student will:

7.1 Use the functions and identify the terminology of the resident software package and its operating procedures.  

7.2 Evaluate copyright laws.  
**SE:** iv-v, iv-ix, 2-3

7.3 Appraise the basic concepts of interactive multi-media design.  
**SE:** 26-30, 49-51, 90-94, 99-104, 112-117, 118-122, 177-182

7.4 Critique multi-media presentations and discuss the likes and dislikes of the presentation.  
**SE:** 49-51, 90-94, 99-104, 112-117, 118-122, 135-137, 139-142, 177-182, 183-185, 186-190

7.5 Analyze equipment and software requirements necessary to make a multi-media presentation.  
**SE:** 2-6, 7-12, 13-16

7.6 Evaluate the audience your presentation will reach.  
**SE:** 7-9, 13-14, 17-19, 22-23, 26-29, 31-39

7.7 Determine the length of the presentation.  

7.8 Develop a storyboard.  
**SE:** 71-77, 82-83, 90-91, 99-104, 118-119, 135-139, 140-142, 380-386
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**Performance Standard: Evidence Standard Is Met**

The student:

- Creates a multi-media presentation applying inputting, formatting and editing skills.

- Inserts and/or scans necessary graphics, digital photography or video clips within the framework of copyright laws.

- Prints an outline and a copy of a presentation with six frames to a page.

- Provides copies of the presentation to an audience and makes the presentation.

**Sample Performance Task**

The student will design an interactive multi-media presentation for recruitment of Business Professionals of America and/or Future Business Leaders of America members. The presentation is designed to be presented to the 7th and 8th grade students.

**Standard 8.0**

The student will demonstrate organizational and professional leadership skills.

**Learning Expectations**

The student will:

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<td>8.6 Demonstrate parliamentary procedure skills through group activities.</td>
<td>SE: 13-16, 17-19, 26-30, 56-62, 90-93</td>
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<tr>
<td>8.7 Analyze the goals and apply the principles of Business Professionals of America and/or Future Business Leaders of America.</td>
<td>SE: 2-3, 7-9, 13-16, 17-19, 26-30, 31-34, 35-39, 40-44, 56-62, 71-75, 75-78, 90-93, 99-102</td>
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Performance Standards: Evidence Standard is Met

The student:

- Researches, analyzes, composes, keys, formats and prints the attributes of a leader.
- Applies effective image-building and public relations techniques.
- Designs, writes formulas, keys and formats financial data for the local chapter in a spreadsheet.
- Organizes and manages a team presentation on leadership.
- Practices proper parliamentary procedure skills through group activities.
- Makes a two-minute report on attributes of a leader.
- Participates in Business Professionals of America and/or Future Business Leaders of America.
### TENNESSEE COMPUTER TECHNOLOGY: RESEARCH AND DEVELOPMENT STANDARDS

#### Sample Performance Task

Divide the students into groups. Each group will work on a different segment of the Business Professionals of America and/or Future Business Leaders of America annual report. Assign each group one of the four major applications to complete this project. The report should include text, graphics, photography, database information and numerical data relating to the chapter(s) activities. Mailable standards will be applied to this project. Remind each group member of his or her responsibilities and role as a group member.

Reference: [http://www.k-12.state.tn.us/pdf/vecomproapp.pdf](http://www.k-12.state.tn.us/pdf/vecomproapp.pdf)