

Texas University Interscholastic League

Contest Event: Computer Applications

The contest focuses on word processing speed and accuracy, computer skills in database and spreadsheet, and integration of applications. Skills tested include formatting copy, mail merge, headers/footers, editing, proofreading, spreadsheet, graphs/charts, and integration of all applications.

The Texas Essential Knowledge and Skills are categorized by course area and grade level. The following are course area abbreviations used for the TEKS in Computer Applications:

English Language Arts and Reading = ELAR 1-4

Business Education = BEd

Technology Education = TechEd

Marketing Education = MktEd

Technology Applications = TechAp

Career Orientation = CO

Each TEKS begins with the outline number for the appropriate course area.

Texas Essential Knowledge and Skills

Word Processing Knowledge and Skills:

(110.62)(2)(E) Use computer technologies to record, locate, analyze, present, and exchange information. (TechAp 123.47)
 (6)(D) Use a variety of computer resources to complete a project. (TechAp 123.47)
 (15)(A) Prepare technical reports and presentations. (TechAp 123.47)
 (4)(C) Deliver an effective business presentation, for example, sales, reports, and proposals. (BEd 120.22)
 (4)(G), (7)(A) Follow oral and written directions. (BEd 120.22,42)
 (6)(A) Format business documents.
 (E) Produce a business report containing text and graphics. (BEd 120.22)
 (3)(A) Identify customary styles of business documents.
 (B) Improve the touch-system skill using the keyboard and keypad to input data.
 (F) Produce business documents, including business letters, business reports, integrating charts, and graphics. (BEd 120.23)
 (7)(A), (1)(A) The student is expected to demonstrate correct posture and position at the keyboard. (BEd 120.24,26)
 (7)(C), (1)(C) Demonstrate the correct touch-system techniques for operating alphabetic keys. (BEd 120.24,26)
 (7)(D), (1)(D) Demonstrate the correct touch-system techniques for operating numeric and symbol keys. (BEd 120.24,26)
 (7)(E), (1)(E) Demonstrate the correct touch-system techniques for operating the ten-key numeric pad. (BEd 120.24,26)
 (7)(F), (1)(F) Demonstrate the correct use of the

Contest Knowledge and Skills

Word Processing Knowledge and Skills:

-Keyboard speed and accuracy skills.

-Knowledge of forms and parts of business document formats.

-Skill in the use of Word processing features and functions, including, but not limited to headers/footers, mail merge, outlines, tables, and the import/export of files and reports.

-Editing and proofreading skills, including, but not limited to, knowledge of proofreaders' marks and correct formatting.

-Formatting skills including but not limited to styles, templates, fonts, and justification.

-Knowledge of the parts of a document including, but not limited to, titles, subtitles, paragraphs, page numbers, insertion of iconic and foreign language symbols, and proper use and formatting of footnotes.

-Use and creation of document templates.

-Use and creation of custom help files.

-Use of correct terminology related to word processing.

-Knowledge of and skill using spell checking and grammar checking features.

-Importation of charts, tables, and graphs into a word processing program and with the ability to

<p>command and function keys. (BEd 120.24,26)</p> <p>(11)(A) Produce business documents using word processing.</p> <p>(B) Correct and print a business document.</p> <p>(C) Produce a business report containing text and graphics. (BEd 120.24)</p> <p>(2)(E) Format personal and business letters and envelopes.</p> <p>(F) Format all pages of a report, including a title page, a reference page, and bibliography.</p> <p>(H) Demonstrate mastery of basic grammar, including use of punctuation marks, keying of numbers and symbols, and capitalization when composing. (BEd 120.26)</p> <p>(3)(D) Apply speed and accuracy in production of documents. (BEd 120.26)</p> <p>(3)(C), (7)(G) Demonstrate ability to operate numeric key pad by touch. (BEd 120.27,42)</p> <p>(4)(C) Manipulate text, graphics, and other electronic images for business document production. (BEd 120.44)</p> <p>(1)(A) Interpret and follow directions to produce documents. (BEd 120.49)</p> <p>(1)(C) Identify and apply correct format for business correspondence and documents. (BEd 120.49)</p> <p>(2)(B) Improve techniques, speed, and accuracy in document production. (BEd 120.49)</p> <p>(3)(C) Produce business correspondence, such as manuscripts, tables, reports, legal documents, and business forms.</p> <p>(D) Produce a variety of business documents under timed situations. (BEd 120.49)</p> <p>(4)(A) Perform advanced word processing functions, such creating templates; selecting styles; applying auto formatting; utilizing borders and shading; defining page setup; converting document formats; searching files; addressing envelopes; creating labels; utilizing mail merge; and customizing the desktop, by using toolbars, menus, and shortcut keys. (BEd 120.49)</p> <p>(6)(B), (4)(B), (7)(B) Develop effective business correspondence (such as business letters and resumes) using correct grammar, spelling, punctuation, and form. (MktEd 124.2,25,32)</p> <p>(4)(A) Communicate effectively in a business setting. (MktEd 124.25)</p> <p>(2)(B) Use digital keyboarding standards in word processing. (TechAp 126.24, 26, 29)</p> <p>(7)(C) Use electronic productivity tools such as the word processor to edit text including move, copy, cut and paste, and spell check.</p> <p>(D) Select and use the categories of type, font, size, style, and alignment appropriate for the task. (TechAp 126.24)</p>	<p>modify these.</p> <ul style="list-style-type: none"> -Linkage of elements created with a word processor into charts and graphs. -Knowledge and skill with importing tables or reports from database applications into a word processing program. -Creation of address book entries. -Skill of tracking changes in a document.
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<p>(13)(D) edit drafts for grammar, mechanics, and spelling; (ELAR 1-4)</p> <p>(17) Oral and Written Conventions/Conventions. Students understand the function of and use the conventions of academic language when speaking and writing. Students will continue to apply earlier standards with greater complexity. Students are expected to:</p> <p>(A) use and understand the function of the following parts of speech in the context of reading, writing, and speaking:</p> <p>(i) more complex active and passive tenses and verbals (gerunds, infinitives, participles);</p> <p>(ii) restrictive and nonrestrictive relative clauses; and</p> <p>(iii) reciprocal pronouns (e.g., each other, one another);</p> <p>(B) identify and use the subjunctive mood to express doubts, wishes, and possibilities; and</p> <p>(C) use a variety of correctly structured sentences (e.g., compound, complex, compound-complex). (ELAR 1-2)</p> <p>(18) Oral and Written Conventions/Handwriting, Capitalization, and Punctuation. Students write legibly and use appropriate capitalization and punctuation conventions in their compositions. Students are expected to:</p> <p>(A) use conventions of capitalization; and</p> <p>(B) use correct punctuation marks including:</p> <p>(i) quotation marks to indicate sarcasm or irony;</p> <p>(ii) comma placement in nonrestrictive phrases, clauses, and contrasting expressions; and</p> <p>(iii) dashes to emphasize parenthetical information. (ELAR 1-2)</p> <p>(17) Oral and Written Conventions/Conventions. Students understand the function of and use the conventions of academic language when speaking and writing. Students will continue to apply earlier standards with greater complexity. Students are expected to:</p> <p>(A) use and understand the function of different types of clauses and phrases (e.g., adjectival, noun, adverbial clauses and phrases); and</p> <p>(B) use a variety of correctly structured sentences (e.g., compound, complex, compound-complex). (ELAR 3-4)</p> <p>(18) Oral and Written Conventions/Handwriting, Capitalization, and Punctuation. Students write legibly and use appropriate capitalization and punctuation conventions in their compositions. Students are expected to correctly and consistently use conventions of punctuation and capitalization. (ELAR 3-4)</p> <p>(19) Oral and Written Conventions/Spelling. Students spell correctly. Students are expected to</p>	
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spell correctly, including using various resources to determine and check correct spellings. (ELAR 1-4)	
<p><u>Database Knowledge and Skills:</u></p> <p>(5)(A) The student is expected to differentiate the nature and interrelationships of fields, records, and files in databases.</p> <p>(B) The student is expected to perform data management procedures, including locate, sort, and organize data; search and query data; retrieve data; and export and import data.</p> <p>(C) The student applies database technology. The student is expected to produce and analyze business reports. (BEd 120.23)</p> <p>(3)(D) Calculate interest and account balances for savings accounts and certificates of deposit. (BEd 120.43)</p> <p>(1)(A), (3)(A) Compute gross pay. (BEd 120.24,42)</p> <p>(1)(B), (3)(C) Compute employee-paid withholdings. (BEd 120.24,42)</p> <p>(1)(C), (3)(B) Compute net pay. (BEd 120.24,42)</p> <p>(3)(M) Compute cash discounts and the amount due on purchase orders after adjustments for transportation charges, discounts, and returned merchandise. (BEd 120.27)</p> <p>(4)(A), (3)(A), (6)(A) Perform calculations involving money, time, space, materials, and data. (MktEd 124.12,24,32)</p> <p>(4)(C) Determine price, profit, cost, and break-even point. (MktEd 124.12)</p> <p>(3)(C) Use productivity tools (such as spreadsheets and databases) to determine price, profit, cost, and break-even point. (MktEd 124.25)</p> <p>(16)(B) Use computer software to create business forms that facilitate the purchasing function. (MktEd 124.25)</p> <p>(6)(C) Use formulas and equations to determine price, profit, costs, and break-even point. (MktEd 124.32)</p> <p>(24)(E) Calculate a product's price. (MktEd 124.32)</p>	<p><u>Database Knowledge and Skills:</u></p> <ul style="list-style-type: none"> -Knowledge of the purpose and use of database applications in a business environment. -Use of database features, formulas and functions. -Skill in creation of tables within a database. -Report creation, modification, and formatting skills. -Creation of queries including but not limited to updates, selects, cross-tabs, make-tables, append and delete. -Creation and use of forms. -Use of relationships within a database. -Use of correct terminology related to databases. -Use and creation of custom help files. -Importation from spreadsheets into database tables. -Publishing database tables or reports to word processing documents. -Creation and modification of fields in tables and reports, including but not limited to changing display formats, modifying numeric formats, and altering formats of merged data. -Skill in sorting and grouping in creation of reports or in modification of order after a report is created. -Skill to add a chart or graph from a spreadsheet into a report. -Use of expression builder. -Use of combo boxes for looking up data for a field.
<p><u>Spreadsheet Knowledge and Skills:</u></p> <p>(4)(A) The student applies spreadsheet technology. The student is expected to perform</p>	<p><u>Spreadsheet Knowledge and Skills:</u></p> <ul style="list-style-type: none"> -Knowledge of purpose and use of spreadsheets in a business environment.

<p>correct mathematical processes, including addition, subtraction, multiplication, and division; percentages and decimals; order of operations principle.</p> <p>(B) The student applies spreadsheet technology. The student is expected to formulate and produce solutions to a variety of business problems, such as budget, personal, and business; payroll; inventory; invoices; income tax preparation; charts and graphs. (BEd 120.23)</p> <p>(1)(A), (3)(A) Compute gross pay. (BEd 120.24,42)</p> <p>(1)(B), (3)(C) Compute employee-paid withholdings. (BEd 120.24,42)</p> <p>(1)(C), (3)(B) Compute net pay. (BEd 120.24,42)</p> <p>(3)(M) Compute cash discounts and the amount due on purchase orders after adjustments for transportation charges, discounts, and returned merchandise. (BEd 120.27)</p> <p>(4)(B) Prepare depreciation schedules. (BEd 120.42)</p> <p>(3)(D) Calculate interest and account balances for savings accounts and certificates of deposit. (BEd 120.43)</p> <p>(4)(A), (3)(A), (6)(A) Perform calculations involving money, time, space, materials, and data. (MktEd 124.12,24,32)</p> <p>(4)(C), (3)(C) Determine price, profit, cost, and break-even point. (MktEd 124.12,24)</p> <p>(3)(B) Employ technology to create and interpret charts and graphs to make informed marketing decisions.</p> <p>(C) Use productivity tools (such as spreadsheets and databases) to determine price, profit, cost, and break-even point. (MktEd 124.25)</p> <p>(6)(C) Use formulas and equations to determine price, profit, costs, and break-even point. (MktEd 124.32)</p> <p>(4)(B) Develop a chart classifying employment opportunities based on educational and training requirements of careers in the student's interest area. (CO 127.12)</p>	<ul style="list-style-type: none"> -Creation and use of spreadsheet functions and formulas. -Use of correct terminology related to spreadsheets. -Use of various spreadsheet features including but not limited to sorts, filters, consolidation, validation, text manipulation, grouping, outlining, subtotals, forms, copying & special pasting, goal seek, pivot tables, conditional formatting. -Use and creation of chart and graphs. -Use and creation of custom help files. -Knowledge of purpose and use of spreadsheets in a math environment. -Skill to merge data into a word processing document. -Data formatting in spreadsheets into a suitable print arrangement, including, but not limited to use of headers, footers, titles, subtitles, column heading, outlining, charts, graphs, and borders. -Skill to link or export charts or graphs to database reports or word processing documents. -Creation and modification of pivot tables and pivot charts. -Creation of multiple worksheets in a given spreadsheet and manipulation of data from one to another. -Knowledge of tracking changes in a spreadsheet.
<p><u>Integration of Applications Knowledge and Skills:</u></p> <p>(3)(C) Utilize hardware and software flexibility needed to produce documents to address different computer applications.</p> <p>(F) Produce business documents, including business letters, business reports, integrating charts, and graphics. (BEd 120.23)</p> <p>(7)(C) Create desktop publications importing text and graphics. (BEd 120.23)</p> <p>(4)(G), (7)(A) Follow oral and written instructions.</p>	<p><u>Integration of Applications Knowledge and Skills:</u></p> <ul style="list-style-type: none"> -Use of integrated features in a Windows-based environment. -Use of correct terminology related to computer applications. - Skills which include but are not limited to the importing & exporting of tables and worksheets, saving to removable media, use of print screens,

<p>(BEd 120.22,42)</p> <p>(4)(C) Manipulate text, graphics, and other electronic images for business document production. (BEd 120.44)</p> <p>(1)(A) Interpret and follow directions to produce documents.</p> <p>(C) Identify and apply correct format for business correspondence and documents. (BEd 120.49)</p> <p>(3)(D) Produce a variety of business documents under timed situations. (BEd 120.49)</p> <p>(4)(B) Import existing spreadsheet and database data into word processing documents. (BEd 120.49)</p> <p>(2)(E) Use computer technologies to record, locate, analyze, present, and exchange information. (TechEd 123.47)</p> <p>(6)(D) Use a variety of computer resources to complete a project. (TechEd 123.47)</p>	<p>and copying & pasting of tables and other data.</p> <p>-Analysis of data and information using the various features and functions found in the above applications.</p> <p>-Use and creation of custom help files.</p> <p>-Skill to link or export charts or graphs to database reports or word processing documents.</p> <p>- Ability to merge data into a word processing document.</p>
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