**2012 – 2013**

# Arkansas Department of Career Education

# Model Framework

## Course Title: Technology Communications (6th)

## Career Cluster: Not Applicable

|  | **Secondary – Business/Marketing Technology** | | |
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| Course Number | 366910 | | |
| Credit | Not Applicable | | |
| CIP Number | (***Program area responsibility to insert CIP code(s)/titles*** [***http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55***](http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55) ) | | |
| Grade Level | 6 | | |
| Prerequisite | 355910 Input Technologies | | |
| Course Type | Foundation | | |
| Teacher Certification | Business teacher or ACE approved grade level certified instructor | | |
| CTSO | Support Course | Support Course | Support Course |
| Facility Requirements | <http://arkansasfacilities.arkansas.gov/SchoolFacManual.aspx> | | |
| Industry Certifications | (***Program area responsibility to insert web address of certification site(s)***) | | |

## Course Description

Technology Communications is a that continues to develop the technology skills learned in the 5th grade. Word processing skills will be expanded as well as the introduction to basic spreadsheet functions and manipulation. The minimum required amount of time to teach this course is forty minutes per week or its equivalent during the school year.

## Program Purpose/Structure

The purpose of this course to prepare students for the technology components of the Common Core State Standards (CCSS) adopted by the state of Arkansas. This course is designed to be taught in a computer lab or mobile lab setting.

## Laboratory Activities

n/a

## Special Notes

none

### Career and Technical Student Organization (CTSO)

There are no CTSO activities tied to this course.

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| ***Standard 1.0 Ownership and Ethics in the Business World*** | | | | |
| **Performance Indicator 1.1**  **Copyright, plagiarism, and ethics** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 1.1.1 Explain what a **copyright** is. | * Compare copyright and fair use. Describe fair use for music, text, video, and graphics. (www.copyright.gov can provide laws and life spans of laws). * Relate student’s feelings through discussion on various scenarios created by the teacher (i.e., How would you feel if someone took a project you did and used it as their own, receiving credit for your work?). | SL6.1C  SL6.2  R6-8.4  R6-8.6  L6.4  W6-8.8 | IT4  IT-WD10 | BL1  BL2  IT1  IT2  IT3 |
| 1.1.2 Explain **plagiarism** and its consequences. | * Cite evidence of plagiarism in the news; giving credit where credit is due (work cited); analyze the consequences associated with plagiarism. | SL6.1C  SL6.2  R6-8.4  R6-8.6  L6.4  W6-8.8 | IT4  IT-WD10 | BL1  BL2  IT1  IT2  IT3 |
| 1.1.3 Explain **ethics** in the business world. | * Create and critique a document for cheating and honesty in the classroom; investigate popular ethics violations and digital ethics violations. | SL6.1C  SL6.2  R6-8.4  R6-8.6  L6.4  W6-8.8 | IT4  IT10  IT-WD10 | BL1  BL2  IT1  IT2  IT3  MGT5 |

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| ***Standard 2.0 Computer Basics and Why they are important*** | | | | |
| **Performance Indicator 2.1**  **Identify hardware components of a computer system** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 2.1.1 Label and define hardware components of a **computer system**: system units and **peripherals.** | * Create a diagram of a computer hardware system - printers, scanners, speakers, microphone, headsets/earphones, etc., and how they function together and label them as input or output devices. | L6.4  L6.6  W6-8.3  R6-8.4  R6-8.7 | IT6 | IT4  IT6 |
| 2.1.2 Explain the care and handling of **storage devices.** | * Discuss different ways to handle storage devices. In small groups construct a set of “care and handling instructions” for one type of storage media. | R6-8.3  R6-8.4 | IT7  IT-WD9 | MGT8 |
| 2.1.3 Explain the proper procedures for starting and shutting down the system unit. | * Demonstrate and have students apply concepts of the proper procedure for starting and shutting down a computer. | R6-8.3  R6-8.4 | CRP1 | IT5 |
| **Performance Indicator 2.2**  **Identify Operating System software** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 2.2.1 Discuss **operating system** with emphasis on the specific system used in the classroom. | * Analyze and synthesize information based on major operating system specific to the classroom * Compare multiple OS using a literacy strategy of your choice | SL6.1C  SL6.2  R6-8.4 | CRP2 | IT5 |
| **Performance Indicator 2.3**  **Review file management features** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 2.3.1 Create a **folder** and **document.** | * Demonstrate the proper steps in creating a folder and a document. Students will create a folder in an appropriate location | L6.6  R6-8.4 | BM5  CRP2  IT7 | MGT8  IT6 |
| 2.3.2 Move and copy a folder. | * Move folder to another location. * Copy folder back to original location. | L6.6  R6-8.4 | BM5  CRP2 | MGT8  IT6 |
| 2.3.3 **Rename** or **delete** folder. | * Demonstrate the proper steps in renaming and deleting a folder. Students will rename the folder created above and then delete the renamed folder. | L6.6  R6-8.4 | BM5  CRP2 | MGT8  IT6 |
| 2.3.4 Identify application file types: **Word Processing, Spreadsheet, Database, and Presentation.** | * Create a document with Word Processing software that lists the various application file types. Save document into the folder created. * Describe various uses for the application software. | R6-8.4  L6.6 | BM5  CRP2 | MGT8  IT6 |

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| ***Standard 3.0 Word Processing*** | | | | |
| **Performance Indicator 3.1**  **Open/Create and edit one-page and multipage documents** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 3.1.1 Review business document formats: Letter, Memorandum, Report, E-Mail, and Table. | * Connect with prior knowledge to create a letter, report, and table. Model proper use of templates to create business documents and e-mails. * Open a teacher created document and apply editing, formatting, and advanced features. * Suggested resource: FBLA Formatting Guide. | W6-8.1d  W6-8.2  W6-8.2e  W6-8.10  R6-8.4 | IT1  IT2  IT6  IT-WD6 | COM1 |
| 3.1.2 Edit a document using basic features: Font, Point Size, Copy and Paste, Cut and Paste, Drag and Drop, Find and Replace, Spell Check, Thesaurus. | * Edit a document previously created (i.e., letter, report, memo, and drafted e-mails). | W6-8.1d  W6-8.2a  R6-8.4 | IT2  IT9 | COM2 COM3 |
| 3.1.3 Format document layout: Margins, Alignment (left, Right, Center, Justified, Top, Bottom), Indent, Tab Stops (Left, Right, Center, Decimal), Line Spacing, Paragraphs, Page Breaks. | * Create an autobiography formatting the document using the correct margins, alignment, indent, tab stops, line spacing, paragraph, and page breaks; and/or create a character biography based on literary character covered in an English class. Work cited page will be required for the character biography. | W6-8.2  W6-8.1d  W6-8.1e  W6-8.4  W6-8.5  W6-8.9  W6-8.10  R6-8.4  R6-8.8 | IT1  IT2  IT9 | IT2  IT6 |
| 3.1.4 Use advanced features: Borders and Shading, Bullets and Numbering, Table, Template, Header, Footer, Sort. | * Apply the following techniques to the autobiography/character biography previously created: borders and shading, bullets and numbering, table, template, header, footer, and sort. | W6-8.2  W6-8.1d  W6-8.1e  W6-8.2a  R6-8.4 | IT2 | IT6 |
| 3.1.5 Examine onscreen document layouts (View); Save, preview, and print document. | * Describe and illustrate the differences between document page layouts available using the previously created document. Save this document in the student’s class folder previously created before previewing and then printing. | R6-8.2  R6-8.4  L6.4  L6.6 | CRP2 | IT6 |

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| ***Standard 4.0 Spreadsheet Basics*** | | | | |
| **Performance Indicator 4.1**  **Examine spreadsheet components** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 4.1.1 Open a spreadsheet. | * Locate and open a teacher created spreadsheet. | R6-8.3  R6-8.4 | CRP2 | IT6 |
| 4.1.2 Identify the parts of a spreadsheet: **active cell, cell, cell reference, column, label, range, row, value, workbook, worksheet.** | * Create a diagram identifying the different parts of a workbook/worksheet. * Using a teacher created screen shot of the spreadsheet window, label the different parts. | R6-8.3  R6-8.4  R6-8.7  W6-8.3  L6.4  L6.6 | CRP2 | IT17 |
| **Performance Indicator 4.2**  **Create and edit a spreadsheet** | **Recommended Application/Activity** | **CCSS Standards** | **CCTC Standards** | **National Standards for Business Education** |
| 4.2.1 Enter data in a spreadsheet: **labels, values, text.** | * Develop a spreadsheet from information collected (i.e. collect information about the students in your room, eyes, hair, height, gender, grade, etc.). | R6-8.3  R6-8.4 | CRP2  IT3 | IT6 |
| 4.2.2 Create **mathematical functions**: **SUM** and **AVERAGE** | * Create a **spreadsheet** comparing prices using functions in a spreadsheet. Calculate the AVERAGE spent, MAX spent, MIN spent, total SUM spent, and COUNT. | R6-8.3 | BM1  FN1  CRP11 | EPF12 |
| 4.2.3 Edit and format a spreadsheet: **alignment, fill, freeze, sort** . | * Connect with previous created spreadsheet; edit with available formatting techniques. | R6-8.9  R6-8.4  R6-8.8 | CRP2 | IT5  IT6 |
| 4.2.4 Illustrate data using **chart/graph.** | * Connect with previous created spreadsheet to create a **line**, **pie, bar**, or **column** chart/graph. | SL6.2 | FN-ACT3 | IT6 |
| 4.2.5 View and print a spreadsheet. | * Apply previously learned concepts to view and print a spreadsheet. | R6-8.2  R6-8.4 | CRP2 | IT6 |

**Glossary**

***Standard 1.0 Ownership and Ethics in the Business World***

Copyright – laws designed to protect intellectual property rights and to provide monetary rewards for inventiveness and hard work; protects works "fixed in any tangible form of expression"

Plagiarism – an act or instance of using or closely imitating the language and thoughts of another author without authorization and the representation of that author's work as one's own, as by not crediting the original author

Ethics – a set of principles of conduct within an organization that guide decision making and behavior

***Standard 2.0 Computer Basics and Why they are important***

Computer system – the computer along with any software and peripheral devices that are necessary to make the computer function

Peripherals – additional hardware that isn't necessary for a computer to function, but does enhance how the computer can be used (e.g., scanner, webcam, microphone, pen tablet)

Storage device – external hardware used to store and retrieve data, such as a disk drive, CD/DVD drive, or flash drive

Operating system – system software that acts as a "go-between", allowing computer hardware and other software to communicate with each other (e.g., Windows 8, Mac OS 10.7, Linux, Unix, etc.)

Folder – an organizational element of a computer operating system used to group files

Document – a computer file containing information input by a computer user and usually created with an application

Rename – to change the title of a document

Delete – to erase a document from a computer

Word processing – the use of software application to create, edit, format, print and save text-based documents, such as letters, reports, and memos

Spreadsheet – a grid of rows and columns containing numbers, text, and formulas used to perform calculations

Database – a collection of organized data that allows access, retrieval, and use of data

Presentation – an application that allows the user to create and save slides to use as a slide show

***Standard 3.0 Word Processing***

Letter – a direct or personal written or printed message addressed to a person or organization

Memorandum – a usually brief communication written for interoffice circulation Report

Table – a set of data arranged in a grid of rows and columns

***Standard 4.0 Spreadsheet Basics***

Active Cell – a selected worksheet cell that is ready for data entry

Cell – the space formed by the intersection of a row and a column; the basic unit of a worksheet

Cell Reference – a unique identifier for a cell which is formed by combining the cell's column letter and row number

Column – a vertical group of cells in a worksheet identified by letters

Label – alphanumeric text that will not be used in calculations

Range – selected group of cells on a worksheet identified by the cell in the upper left corner and the cell in the lower right corner, separated by a colon

Row – a horizontal group of cells in a worksheet identified by numbers

Value – numeric characters that can be used in a calculation

Workbook – a collection of related worksheets

Worksheet – the workspace made up of columns and rows where data is entered to create an electronic spreadsheet

Values – numeric characters that can be used in a calculation

Text – a group of characters - usually words - that are used as data in a spreadsheet program.

Mathematical Function – a built-in command which can be used to perform common mathematical operations such as addition, multiplication, and rounding numbers

SUM – adds all the numbers in a range of cells

AVERAGE – returns the average (arithmetic means) of its arguments

Alignment – the position of data within a cell

Fill – to copy a cell's contents and/or formatting into an adjacent cell or range

Freeze – keeps selected rows or columns visible on the screen as the rest of the worksheet scrolls

Sort – to arrange a list of words or numbers in ascending or descending order

Chart/Graph – a graphic representation of values and their relationships: pie, line, column, bar

Pie – a chart that shows the relationship of a part to a whole

Line – a chart that uses points connected by a line to illustrate values in a worksheet

Column – a vertical group of cells in a worksheet identified by letters

Bar – a chart that uses bars of varying height to illustrate values in a worksheet

**Common Core State Standards Grades 6-8**

**ELA Speaking and Listening Standards Grade 6**

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly. **SL6.1**

a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. **SL6.1a**

b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. **SL6.1b**

c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. **SL6.1c**

d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. **SL6.1d**

2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. **SL6.2**

3. Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. **SL6.3**

4. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. **SL6.4**

5. Include multimedia components (e.g., graphics, mages, music, sound) and visual displays in presentations to clarify information. **SL6.5**

**ELA Speaking and Listening Standards Grade 7**

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 7 topics, texts, and issues,* building on others’ ideas and expressing their own clearly. **SL7.1**

a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. **SL7.1a**

b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. **SL7.1b**

c. Pose questions that elicit elaboration and respond to others’ questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. **SL7.1c**

d. Acknowledge new information expressed by others and, when warranted, modify their own views. **SL7.1d**

2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. **SL7.2**

3. Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. **SL7.3**

4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. **SL7.4**

5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. **SL7.5**

**ELA Speaking and Listening Standards Grade 8**

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others’ ideas and expressing their own clearly. **SL8.1**

a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. **SL8.1a**

b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. **SL8.1b**

c. Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas. **SL8.1c**

d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. **SL8.1d**

2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. **SL8.2**

3. Delineate a speaker’s argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. **SL8.3**

4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. **SL8.4**

5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. **SL8.5**

**ELA Language Grade 6**

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. **L6.4**

a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. **L6.4a**

b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible). **L6.4b**

c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. **L6.4c**

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary. **L6.4d**

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L6.6**

**ELA Language Grade 7**

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. **L7.4**

a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. **L7.4a**

b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). **L7.4b**

c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. **L7.4c**

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). **L7.4d**

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L7.6**

**ELA Language Grade 8**

4. Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. **L8.4**

a. Use context (e.g., the overall meaning of a sentence or paragraph; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase. **L8.4a**

b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede). **L8.4b**

c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. **L8.4c**

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). **L8.4d**

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. **L8.6**

**Reading Standards for Literacy in Science and Technical Subjects Grades 6-8**

1. Cite specific textual evidence to support analysis of science and technical texts. **R6-8.1**

2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

**R6-8.2**

3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. **R6-8.3**

4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. **R6-8.4**

5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. **R6-8.5**

6. Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. **R6-8.6**

7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). **R6-8.7**

8. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. **R6-8.8**

9. Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. **R6-8.9**

10. By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. **R6-8.10**

**Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Grades 6-8**

1. Write arguments focused on discipline-specific content. **W6-8.1**

a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically **W6-8.1a**

b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. **W6-8.1b**

c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. **W6-8.1c**

d. Establish and maintain a formal style. **W6-8.1d**

e. Provide a concluding statement or section that follows from and supports the argument presented

2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. **W6-8.2**

a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. **W6-8.2a**

b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

**W6-8.2b**

c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. **W6-8.2c**

d. Use precise language and domain-specific vocabulary to inform about or explain the topic. **W6-8.2d**

e. Establish and maintain a formal style and objective tone. **W6-8.2e**

f. Provide a concluding statement or section that follows from and supports the information or explanation presented. **W6-8.2f**

3. Students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. **W6-8.3**

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**W6-8.4**

5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. **W6-8.5**

6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. **W6-8.6**

7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. **W6-8.7**

8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. **W6-8.8**

9. Draw evidence from informational texts to support analysis reflection, and research. **W6-8.9**

10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. **W6-8.10**

**Common Career and Technical Core Standards**

***Business Management and Administration Career Cluster***

**Business Management and Administration Career Cluster Standards**

1. Utilize mathematical concepts, skills, and problem solving to obtain necessary information for decision making in business. **BM1**
2. Describe laws, rules, and regulations as they apply to effective business operations. **BM2**
3. Explore, develop, and apply strategies for ensuring a successful business career. **BM3**
4. Identify, demonstrate, and implement solutions in managing effective customer relationships. **BM4**
5. Implement systems, strategies, and techniques used to manage information in a business. **BM5**
6. Implement, monitor, and evaluate processes to ensure efficiency and quality results. **BM6**

**Administrative Support Career Pathway (BM-ADM)**

1. Plan, staff, lead, and organize human resources to enhance employee productivity and satisfaction. **BM-ADM1**
2. Access, evaluate and disseminate information for business decision making. **BM-ADM2**
3. Plan, monitor and manage day-to-day business activities. **BM-ADM3**

**General Management Career Pathway (BM-MGT)**

1. Describe and follow laws and regulations affecting business operations and transactions. **BM-MGT1**
2. Access, evaluate, and disseminate information for business decision making. **BM-MGT2**
3. Apply economic concepts fundamental to global business operations. **BM-MGT3**
4. Employ and manage techniques, strategies, and systems to enhance business relationships. **BM-MGT4**
5. Plan, monitor, and manage the use of financial resources to ensure a business’ financial well-being. **BM-MGT5**
6. Plan, monitor, and manage day-to-day business functions activities to sustain continued business functioning. **BM-MGT6**
7. Plan, organize, and manage an organization/department to achieve business goals. **BM-MGT7**
8. Create strategic plans used to manage business growth, profit, and goals. **BM-MGT8**

***Finance Career Cluster***

**Finance Career Cluster Standards (FN)**

1. Utilize mathematical concepts, skills, and problem solving to obtain necessary information for decision making in the finance industry. **FN1**
2. Utilize tools, strategies, and systems to plan, monitor, manage, and maintain the use of financial resources. **FN2**
3. Plan, staff, lead, and organize human resources in finance to enhance employee productivity and job satisfaction. **FN3**
4. Determine effective tools, techniques, and systems to communicate and deliver value to finance customers. **FN4**
5. Create and maintain positive, ongoing relationships with finance customers. **FN5**
6. Plan, monitor, and manage day-to-day activities to ensure effective and efficient finance operations. **FN6**
7. Implement safety, health, and environmental controls to ensure a safe and productive finance workplace. **FN7**
8. Describe and follow laws, regulations, and ethical standards that affect finance operations and transactions. **FN8**
9. Plan, manage, and maintain the use of financial resources to protect solvency. **FN9**
10. Plan, organize, and manage a finance organization/department. **FN10**
11. Plan, monitor, and manage day-to-day activities required to sustain continued business functioning. **FN11**
12. Access, evaluate, and disseminate financial information to enhance financial decision-making processes. **FN12**
13. Manage a financial product or service mix in order to respond to market opportunities. **FN13**
14. Employ financial risk-management strategies and techniques used to minimize business loss. **FN14**

**Accounting Career Pathway (FN-ACT)**

1. Describe and follow laws and regulations to manage accounting operations and transactions. **FN-ACT1**
2. Utilize accounting tools, strategies, and systems to plan, monitor, manage, and maintain the use of financial resources. **FN-ACT2**
3. Process, evaluate, and disseminate financial information to assist business decision making. **FN-ACT3**
4. Utilize career-planning concepts, tools, and strategies to explore, obtain, and/or develop an accounting career. **FN-ACT4**

**Banking Services Career Pathway (FN-BNK)**

1. Describe and abide by laws and regulations in order to manage business operations and transactions in the banking services industry. **FN-BNK1**
2. Create and maintain positive, ongoing relationships with banking customers in order to enhance the organization's image. **FN-BNK2**
3. Manage the use of financial resources to enhance banking performance. **FN-BNK3**
4. Demonstrate the use of banking technology and equipment. **FN-BNK4**
5. Manage the day-to-day activities within a banking organization to ensure secure operations. **FN-BNK5**
6. Utilize career planning concepts, tools, and strategies to explore, obtain, and develop a career in banking services. **FN-BNK6**
7. Determine client needs and wants and respond through planned, personalized communication to influence purchase decisions and enhance future business opportunities in banking services. **FN-BNK7**

**Business Finance Career Pathway (FN-BFN)**

1. Describe and follow laws and regulations to manage business operations and transactions in corporate finance. **FN-BFN1**
2. Manage the use of financial resources to ensure business stability. **FN-BFN2**
3. Utilize career-planning concepts, tools, and strategies to explore, obtain, and/or develop in a corporate finance career. **FN-BFN3**
4. Employ risk-management strategies and techniques in corporate finance to minimize business loss. **FN-BFN4**

**Insurance Career Pathway (FN-INS)**

1. Describe and follow laws and regulations to manage business operations and transactions in the insurance industry. **FN-ISN1**
2. Plan, monitor, and manage day-to-day insurance organization activities. **FN-ISN2**
3. Utilize career-planning concepts, tools, and strategies to explore, obtain, and/or develop a career in insurance. **FN-INS3**
4. Demonstrate underwriting techniques and strategies to evaluate the risk posed by potential insurance clients. **FN-INS4**
5. Determine client needs and wants and respond through planned, personalized communication to guide purchase decisions and enhance future insurance business opportunities. **FN-INS5**

**Securities and Investments Career Pathway (FN-SEC)**

1. Describe and follow laws and regulations to manage business operations and transactions in the securities and investments industry. **FN-SEC1**
2. Manage the use of financial resources to perform key duties in the securities and investments industry. **FN-SEC2**
3. Plan, monitor, and manage day-to-day securities and investments operations. **FN-SEC3**
4. Utilize career-planning concepts, tools, and resources to explore, obtain, and/or develop in a securities and investments career. **FN-SEC4**
5. Determine client needs and wants and respond through planned, personalized communication to guidepurchase decisions and enhance future securities and investments opportunities. **FN-SEC4**

***Hospitality & Tourism Career Cluster***

**Hospitality & Tourism Career Cluster Standards (HT)**

1. Describe the key components of marketing and promoting hospitality and tourism products and services. **HT1**
2. Evaluate the nature and score of the Hospitality and Tourism Career Cluster and the role of hospitality and tourism in society and the economy. **HT2**
3. Demonstrate hospitality and tourism customer service skills that meet customers' needs. **HT3**
4. Describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace. **HT4**
5. Identify potential (real and perceived) hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace. **HT5**
6. Describe career opportunities and means to attain those opportunities in each of the Hospitality and Tourism Career Pathways. **HT6**

**Travel and Tourism Career Pathway (HT-TT)**

1. Apply information about time zones, seasons, and domestic and international maps to create or enhance travel. **HT-TT1**
2. Apply unit and time conversion skills to develop travel schedules and compute cost, distance, and time (including travel time) factors. **HT-TT2**
3. Analyze cultural diversity factors to enhance travel planning. **HT-TT3**
4. Assess the potential (real and perceived) hazards related to multiple environments, and recommend appropriate safety, health, and security measures for travelers. **HT-TT4**
5. Develop a safety and security plan containing proactive and reactive solutions to manage emergency situations for travelers and staff. **HT-TT5**
6. Use common travel and tourism terminology used to communicate within the industry. **HT-TT6**
7. Customize travel with diverse transportation, lodging, cruise, and food options. **HT-TT7**
8. Compare and contrast services and products from related industries to understand and evaluate how they impact the delivery of travel and tourism products and services to customers. **HT-TT8**
9. Identify the community elements necessary to maintain cooperative tourism development efforts. **HT-TT9**
10. Develop a travel product that matches customer needs, wants, and expectations. **HT-TT10**
11. Design promotional packages to effectively market travel and tourism. **HT-TT11**
12. Select the most effective communication technique and media venue to convey travel marketing information to a target audience. **HT-TT12**

***Information Technology Career Cluster***

**Information Technology Career Cluster Standards (IT)**

1. Demonstrate effective professional communication skills and practices that enable positive customer relationships. **IT1**
2. Use product or service design processes and guidelines to produce a quality information technology (IT) product or service. **IT2**
3. Demonstrate the effectiveness of cross-functional teams in achieving IT project goals. **IT3**
4. Demonstrate positive cyber citizenry by applying industry accepted ethical practices and behaviors. **IT4**
5. Explain the implications of IT on business transformation and development. **IT5**
6. Describe trends in emerging and evolving computer technologies and their influence on IT practices. **IT6**
7. Perform standard computer backup and restore procedures to protect IT information. **IT7**
8. Recognize and analyze potential IT security threats to develop and maintain security requirements. **IT8**
9. Describe quality assurance practices and methods employed in producing and providing quality IT products and services. **IT9**
10. Describe the use of computer forensics to prevent and solve information technology crimes and security breaches. **IT10**

**Web and Digital Communications Career Pathway (IT-WD)**

1. Analyze customer requirements to design and develop a Web or digital communication product. **IT-WD1**
2. Apply the design and development process to produce user-focused Web and digital communications solutions. **IT-WD2**
3. Write product specifications that define the scope of work aligned to customer requirements. **IT-WD3**
4. Demonstrate the effective use of tools for digital communication production, development, and project management. **IT-WD4**
5. Develop, administer, and maintain Web applications. **IT-WD5**
6. Design, create, and publish a digital communication product based on customer needs. **IT-WD6**
7. Evaluate the functionality of a digital communication product using industry accepted techniques and metrics. **IT-WD7**
8. Implement quality assurance processes to deliver quality digital communication products and services. **IT-WD8**
9. Perform maintenance and customer support functions for digital communication products. **IT-WD9**
10. Comply with intellectual property laws, copyright laws and ethical practices when creating Web and digital communications. **IT-WD10**

***Marketing Career Cluster***

**Marketing Career Cluster Standards (MK)**

1. Describe the impact of economics, economics systems, and entrepreneurship on marketing. **MK1**
2. Implement marketing research to obtain and evaluate information for the creation of a marketing plan. **MK2**
3. Plan, monitor, manage, and maintain the use of financial resources for marketing activities. **MK3**
4. Plan, monitor, manage, and maintain the day-to-day activities required for continued marketing business operations. **MK4**
5. Describe career opportunities and the means to achieve those opportunities in each of the Marketing Career Pathways. **MK5**
6. Select, monitor, and manage sales and distribution channels. **MK6**
7. Determine and adjust prices to maximize return while maintaining customer perception of value. **MK7**
8. Obtain, develop, maintain, and improve a product or service mix in response to market opportunities. **MK8**
9. Communicate information about products, services, images, and/or ideas to achieve a desired outcome. **MK9**
10. Use marketing strategies and processes to determine and meet client needs and wants. **MK10**

**Marketing Management Career Pathway (MK-MGT)**

1. Plan, organize, and lead marketing staff to achieve business goals. **MK-MGT1**
2. Plan, manage, and monitor day-to-day marketing management operations. **MK-MGT2**
3. Plan, manage, and organize to meet the requirements of the marketing plan. **MK-MGT3**
4. Access, evaluate, and disseminate information to aid in making marketing management decisions. **MK-MGT4**
5. Determine and adjust prices to maximize return and meet customers' perceptions of value. **MK-MGT5**
6. Obtain, develop, maintain, and improve a product or service mix in response to market opportunities. **MK-MGT6**
7. Communicate information about products, services, images, and/or ideas. **MK-MGT7**

**Marketing Research Career Pathway (MK-RES)**

1. Plan, organize, and manage day-to-day marketing research activities. **MK-RES1**
2. Design and conduct research activities to facilitate marketing business decisions. **MK-RES2**
3. Use information systems and tools to make marketing research decisions. **MK-RES3**

***Common Career and Technical Core Career Ready Practices (CCTC CRP)***

1. Act as a responsible and contributing citizen and employee. **CRP1**

2. Apply appropriate academic and technical skills. **CRP2**

3. Attend to personal health and financial well-being. **CRP3**

4. Communicate clearly, effectively, and with reason. **CRP4**

5. Consider the environmental, social, and economic impacts of decisions. **CRP5**

6. Demonstrate creativity and innovation. **CRP6**

7. Employ valid and reliable research strategies. **CRP7**

8. Utilize critical thinking to make sense of problems and persevere in solving them. **CRP8**

9. Model integrity, ethical leadership, and effective management. **CRP9**

10. Plan education and career path aligned to personal goals.**CRP10**

11. Use technology to enhance productivity. **CRP11**

12. Work productively in teams while using cultural/global competence. **CRP12**

**National Standards for Business Education (2013)**

**Accounting**

*The Accounting Profession*

**ACC1** Explain the role that accountants play in business and society.

**ACC2** Describe career opportunities in the accounting profession.

**ACC3** Demonstrate the skills and competencies required to be successful in the accounting profession and/or in an accounting-related career.

*Financial Reports*

**ACC4** Use an annual report and financial statements to make informed business decisions.

*Financial Analysis*

**ACC5** Assess the financial condition and operating results of a company and analyze and interpret financial statements and information to make informed business decisions.

*Accounting Principles*

**ACC6** Identify and describe generally accepted accounting principles (GAAP), explain how the application of GAAP impacts the recording of financial transactions and the preparation of financial statements.

*Accounting Process*

**ACC7** Complete the steps in the accounting cycle in order to prepare the financial statements.

*Interpretation and Use of Data*

**ACC8** Use planning and control principles to evaluate the performance of an organization and apply differential analysis and present-value concepts to make informed business decisions.

*Compliance*

Personal Finance

**ACC9** Explain the individual income tax procedures and requirements to comply with tax laws and regulations.

Financial reporting

**ACC10** Distinguish between generally accepted accounting principles and income tax law.

Payroll

**ACC11** Apply appropriate accounting practices to payroll.

**Business Law**

*Basics of the Law*

**BL1** Analyze the relationship between ethics and the law and describe sources of the law, the structure of the court system, different classifications of procedural law, and different classifications of substantive law.

*Contract Law, Law of Sales, and Consumer Law*

**BL2** Analyze the relationships between contract law, law of sales, and consumer law.

*Agency and Employment*

**BL3** Analyze the role and importance of agency law, and employment law as they relate to the conduct of business in the national and international marketplaces.

*Business Organizations*

**BL4** Describe the major types of business organizations, including sole proprietorships, partnerships, corporations, and limited liability companies, operating within the socioeconomic arena of the national and international marketplace.

*Property Law*

**BL5** Explain the legal rules that apply to personal property, real property, and intellectual property.

*Negotiable Instruments, Insurance, Secured Transactions, Bankruptcy*

**BL6** Analyze the functions of negotiable instruments, insurance, secured transactions, and bankruptcy.

*Computer Law*

**BL7** Explain how advances in computer technology impact such areas as intellectual property, contract law, criminal law, tort law, and international law.

*Environmental Law and Energy Regulation*

**BL8** Explain the legal rules that apply to environmental law and energy regulation.

*Family Law*

**BL9** Explain the legal rules that apply to marriage, divorce, and child custody.

*Wills and Trusts*

**BL10 D**etermine the appropriateness of wills and trusts in estate planning.

**Career Development**

*Strategic Career Planning*

**CD1** Apply knowledge gained through individual assessment to develop a comprehensive set of goals and an individual career plan.

*Career Exploration & Research*

**CD2** Utilize career resources to develop a career information portfolio that includes international career opportunities.

*Career Readiness Expectations*

**CD3** Relate the importance of career readiness skills to career development.

*School-to-Career Transition*

**CD4** Develop strategies to effectively transition from school to career.

*Lifelong Learning*

**CD5** Relate the importance of lifelong learning to personal and career success.

**Communication**

*Foundations of Communication*

**COM1** Listen actively, use the communication process, read and research information, and integrate technology to enhance communication

*Interpersonal Skills*

**COM2** Apply interpersonal skills in personal and professional environments to communicate effectively.

*Written Communication*

**COM3** Prepare clear, complete, concise, correct, and courteous written messages for personal and professional uses.

*Spoken Communication*

**COM4** Demonstrate professional speaking techniques and strategies.

*Employment Communication*

**COM5** Communicate effectively for employment success.

**Economics & Personal Finance**

***Economics***

*Economics Allocation of Resources*

**EPF1** Assess opportunity costs and trade-offs involved in making choices about how to use scarce economic resources.

*Economic Systems*

**EPF2** Explain why societies develop economic systems, identify the basic features of different economic systems, and analyze the major features of the U.S. Economic system.

*Economic Institutions and Incentives*

**EPF3** Analyze the role of core economic institutions and incentives in the U.S. Economy.

*Markets and Prices*

**EPF4** Analyze the role of markets and prices in the U.S. Economy.

*Market Structures*

**EPF5** Analyze the different types of market structures and the effect they have on the price and the quality of the goods and services produced.

*Productivity*

**EPF6** Explain the importance of productivity and analyze how specialization, division of labor, investment in physical and human capital, and technological change affect productivity and global trade.

*The Role of Government*

**EPF7** Analyze the role of government in economic systems, especially the role of government in the U.S. Economy.

*Global Economic Concepts*

**EPF8** Examine the role of trade, protectionism, and monetary markets in the global economy.

*Aggregate Supply and Aggregate Demand*

**EPF9** Analyze how the U.S. Economy functions as a whole and describe selected macroeconomic measures of economic activity.

***Personal Finance***

*Personal Decision Making*

**EPF10** Use a rational decision-making process as it applies to the roles of citizens, workers, and consumers.

*Earning and Reporting Income*

**EPF11** Identify various forms of income and analyze factors that affect income as a part of the career decision-making process.

*Managing Finances and Budgeting*

**EPF12** Develop and evaluate a spending/savings plan.

*Saving and Investing*

**EPF13** Evaluate savings and investment options to meet short- and long-term goals.

*Buying Goods and Services*

**EPF14** Apply a decision-making model to maximize consumer satisfaction when buying goods and services.

*Banking and Financial Institutions*

**EPF15** Evaluate services provided by financial deposit institutions to transfer funds.

*Using Credit*

**EPF16** Analyze factors that affect the choice of credit, the cost of credit, and the legal aspects of using credit.

*Protecting Against Risk*

**EPF17** Analyze choices available to consumers for protection against risk and financial loss.

**Entrepreneurship**

*Entrepreneurs and Entrepreneurial Opportunities*

**ENT1** Recognize that entrepreneurs possess unique characteristics and examine the role of innovation in entrepreneurial opportunities.

*Entrepreneurial Trends*

**ENT2** Recognize trends and social responsibilities can lead to entrepreneurial opportunities.

*Economics*

**ENT3** Apply economic concepts when making decisions for an entrepreneurial venture.

*Marketing*

**ENT4** Develop a marketing vision to introduce a product or service.

*Finance*

**ENT5** Use the financial concepts and tools needed by the entrepreneur in making business decisions.

*Accounting*

**ENT6** Recognize that entrepreneurs must establish, maintain, and analyze appropriate records to make business decisions.

*Management*

**ENT7** Develop a management plan for an entrepreneurial venture.

*Legal*

**ENT8** Analyze how forms of business ownership, government regulations, and legal regulations affect entrepreneurial ventures.

*Business Plans*

**ENT9** Develop a business plan.

**Information Technology**

*Impact on Society*

**IT1** Assess the impact of information technology in a global society.

*Information Literacy*

**IT2** Gather, evaluate, use, cite, and disseminate information from technology sources.

*Digital Citizenship*

**IT3** Demonstrate respectful, responsible and ethical behavior in a digital world.

*Devices and Components*

**IT4** Describe current and emerging devices and components; configure, install, and upgrade equipment; diagnose problems; and repair hardware.

*Operating Systems*

**IT5** Identify, evaluate, select, install, use, upgrade, and customize operating systems. Diagnose and solve problems with various types of operating system utilities.

*Input Technologies*

**IT6** Use various input technologies to enter and manipulate information appropriately.

*Applications*

**IT7** Identify, evaluate, select, install, use, upgrade, troubleshoot, and customize applications.

*Digital Media*

**IT8** Use and create digital media.

*Web Development and Design*

**IT9** Design, develop, test, implement, update, and evaluate web solutions.

*Database Management Systems*

**IT10** Use, plan, develop, and maintain database management systems.

*Project Management and Systems Analysis*

**IT11** Analyze and design projects and information systems using appropriate management and development tools.

*Programming and Application Development*

**IT12** Design, develop, test, and implement programs and applications.

*Data and Networking Infrastructures*

**IT13** Develop the skills to design, deploy, and administer networks and telecommunications systems.

*Information Technology Planning and Acquisition*

**IT14** Plan the selection and acquisition of information technologies.

*Security and Risk Management*

**IT15** Design and implement security and risk management policies and procedures for information technology.

*End-User Support and Training*

**IT16** Develop the technical and interpersonal skills and knowledge to train and support the user community.

*Information Technology and Business Functions*

**IT17** Describe the information technology components of business functions and explain their interrelationships.

*Information Technology Careers*

**IT18** Explore career opportunities in information technology.

**International Business**

*Foundations of International Business*

**IB1** Explain the role of international business and identify its benefits and costs; analyze how it impacts business at all levels, including the local, state, national, and international levels.

*The Global Business Environment*

**IB2** Describe the interrelatedness of the social, cultural, political, legal, economic, and technological factors that shape and impact the global business environment.

*International Business Communication*

**IB3** Apply communication strategies necessary and appropriate for effective and mutually-beneficial international business relations.

*Global Business Ethics and Social Responsibility*

**IB4** Describe the factors that define what is considered ethical and socially responsible business behavior in a global business environment.

*Organizational Structures for International Business Activities*

**IB5** Identify forms of business ownership and entrepreneurial opportunities available in international business.

*International Trade*

**IB6** Relate balance of trade concepts to the import/export process.

*International Management*

**IB7** Analyze special challenges in operations, human resources, and strategic management in international business.

*International Marketing*

**IB8** Apply marketing concepts to international business situations.

*International Finance*

**IB9** Explain the concepts, role, and importance of international finance and risk management.

**Management**

*Management Functions*

**MGT1** Analyze the management functions and their implementation and integration within the business environment.

*Management Theories*

**MGT2** Analyze management theories and their application within the business environment.

*Business Organization*

**MGT3** Analyze the organization of a business.

*Personal Management Skills*

**MGT4** Develop personal management skills to function effectively and efficiently in a business environment.

*Ethics and Social Responsibility*

**MGT5** Examine the role of ethics and social responsibility in decision making.

*Human Resource Management*

**MGT6** Describe human resource functions and their importance to an organization’s successful operation.

*Organized Labor*

**MGT7** Describe the role of organized labor and its influence on government and business.

*Technology and Information Management*

**MGT8** Utilize information and technology tools to conduct business effectively and efficiently.

*Industry Analysis*

**MGT9** Analyze a business organization’s competitive position within the industry.

*Financial Decision Making*

**MGT10** Analyze financial data influenced by internal and external factors in order to make short-term and long-term decisions.

*Operations Management*

**MGT11** Apply operations management principles and procedures to the design of an operations plan.

**Global Perspective**

**MGT12** Examine the issues of corporate culture and managing in the global environment.

**Marketing**

*Foundations of Marketing*

**MKT1** Recognize the customer-oriented nature of marketing and analyze the impact of marketing activities on the individual, business, and society.

*Consumers and Their Behavior*

**MKT2** Analyze the characteristics, motivations, and behaviors of consumers.

*External Factors*

**MKT3** Analyze the influence of external factors on marketing.

*The Marketing Mix*

**MKT4** Analyze the elements of the marketing mix, their interrelationships, how they are used in the marketing process, and their role in positioning.

*The Marketing Plan*

**MKT5** Describe the elements, design, and purposes of a marketing plan.

*Marketing Research*

**MKT6** Analyze the role of marketing research in decision-making.