



ALIGNED WITH  
CERTIPORT'S  
IC<sup>3</sup>®  
STANDARDS

**BUSINESS AND COMPUTER  
TECHNOLOGY  
SKILLS STANDARDS  
OD30901**

The following skills standards are primarily drawn from the 2005 Certiport Internet and Computing Core Certification (IC<sup>3</sup> ®) program taskings (Duties A – EE). The format was revised to conform to the model utilized for other skills standards within the Oklahoma Department of Career and Technology Education system.

The Certiport Internet and Computing Core Certification (IC<sup>3</sup> ®) program is the world's first validated, standards-based training and certification program for basic computing and Internet knowledge and skills or 'digital literacy'. Successful completion of IC<sup>3</sup> ensures students and workers have the knowledge and skills required for basic use of computer hardware, software, networks, and the Internet. Achieving IC<sup>3</sup> certification ensures that students have the essential skills to experience enriched learning outcomes, the portable credentials to apply to postsecondary institutions or perspective employers, and the level of digital literacy required to participate in the Global Village.

The IC<sup>3</sup> program was strategically built by professional researchers, exam developers, psychometricians, and hundreds of subject matter experts from 19 countries. IC<sup>3</sup> has received international acclaim for its rigorous test creation, currency, and relevancy.

For additional information please contact:

**Certiport, Inc.**

Certiport Plaza

1276 South 820 East

Suite 200

American Fork, UT 84003

USA

Main Telephone: 1-888-999-9830

International: (801) 847-3100

**Certiport**

Achieve. Distinguish. Advance.

[www.certiport.com](http://www.certiport.com)

Copyright 2009

Oklahoma Department of Career and Technology Education

All right reserved

Printed in the United States of America by the  
Oklahoma Department of Career and Technology Education

Stillwater, Oklahoma

The Oklahoma Department of Career and Technology Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

## ***COMPETENCY-BASED EDUCATION: OKLAHOMA'S RECIPE FOR SUCCESS***

### ***BY THE INDUSTRY FOR THE INDUSTRY***

Oklahoma's *CareerTech* system of competency-based education uses industry professionals and certification standards to identify the knowledge and abilities needed to master an occupation. This industry input provides the foundation for development of instructional materials that help prepare the comprehensively trained, highly skilled employees demanded by our workplace partners.

### ***TOOLS FOR SUCCESS***

*CareerTech* relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

**Skills standards** provide the foundation for competency-based instruction in Oklahoma's *CareerTech* system. The skills standards outline the knowledge, skills, and abilities needed to perform related jobs within an industry. Skills standards are aligned with national skills standards; therefore, a student trained to the skills standards possesses technical skills that make him/her employable in both state and national job markets.

**Curriculum materials** contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources provide supplemental activities to enhance learning and provide hands-on training experiences.

**Competency Assessments** test the student over material outlined in the skills standards and taught using the curriculum materials. When used with classroom performance evaluations, written competency assessments provide a means of measuring occupational readiness.

Although each of these components satisfy a unique purpose in competency-based education, they work together to reinforce the skills and abilities students need to gain employment and succeed on the job.

### ***MEASURING SUCCESS***

Written competency assessments are used to evaluate student performance. Results reports communicate competency assessment scores to students and provide a breakdown of assessment results by duty area. The results breakdown shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Group analysis of student results also provides feedback to instructors seeking to improve the effectiveness of career and technology training. Performance patterns in individual duties indicate opportunities to evaluate training methods and customize instruction.

### ***TRUE TO OUR PURPOSE***

"Helping Oklahomans succeed in the workplace" defines the mission of Oklahoma *CareerTech* and its competency-based system of instruction. Skills standards, curriculum, and assessments that identify and reinforce industry expectations provide accountability for programs and assure *CareerTech*'s continued role in preparing skilled workers for a global job market

Copyright 2009  
Oklahoma Department of Career and Technology Education  
All rights reserved

Printed in the United States of America by the  
Oklahoma Department of Career and Technology Education  
Stillwater, Oklahoma

The Oklahoma Department of Career and Technology Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

**BUSINESS AND COMPUTER TECHNOLOGY  
SKILLS STANDARDS  
Frequency and Criticality Ratings**

- Duty A: Identify Types of Computers, How They Process Information, and How Individual Computers Interact With Other Computing Systems and Devices
- Duty B: Identify the Function of Computer Hardware Components
- Duty C: Identify the Factors That Go Into an Organizational Decision on How to Purchase Computer Equipment
- Duty D: Identify How to Maintain Computer Equipment and Solve Common Problems Relating to Computer Hardware
- Duty E: Identify How Software and Hardware Work Together to Perform Computing Tasks, and How Software is Developed and Upgraded
- Duty F: Identify Different Types of Software, General Concepts Relating to Software Categories, and the Tasks to Which Each Type of Software is Most Suited or Not Suited
- Duty G: Identify What an Operating System Is and How It Works, and Solve Common Problems Related to Operating Systems
- Duty H: Manipulate and Control the Windows Desktop, Files, and Disks
- Duty I: Identify How to Change System Settings, Install, and Remove Software
- Duty J: Be Able to Start and Exit a Windows Application, and Utilize Sources of Online Help
- Duty K: Identify Common On-Screen Elements of Windows Applications, Change Application Settings, and Manage Files Within an Application
- Duty L: Perform Common Editing and Formatting Functions
- Duty M: Perform Common Printing Functions
- Duty N: Be Able to Format Text and Documents Including the Ability to Use Automatic Formatting Tools
- Duty O: Be Able to Insert, Edit, and Format Tables in a Document
- Duty P: Be Able to Modify Worksheet Data and Structure, and Format Data in a Worksheet
- Duty Q: Be Able to Sort Data, Manipulate Data Using Formulas and Functions, and Add and Modify Charts in a Worksheet
- Duty R: Be Able to Perform Basic Database Operations
- Duty S: Demonstrate Knowledge of Graphics Software
- Duty T: Be Able to Create and Format Simple Presentations
- Duty U: Identify Network Fundamentals, and the Benefits and Risks of Network Computing
- Duty V: Identify the Relationship Between Computer Networks, Other Communications Networks (Like the Telephone Network), and the Internet
- Duty W: Identify How Electronic Mail Works
- Duty X: Identify How to Use an Electronic Mail Application
- Duty Y: Identify the Appropriate Use of E-mail, and E-mail Related "Netiquette"
- Duty Z: Identify Different Types of Information Sources on the Internet
- Duty AA: Be Able to Use a Web Browsing Application
- Duty BB: Be Able to Search the Internet for Information

Duty CC: Identify How Computers Are Used in Different Areas of Work, School, and Home

Duty DD: Identify the Risks of Using Computer Hardware and Software

Duty EE: Identify How to Use Computers and the Internet Safely, Legally, Ethically, and Responsibly

Duty FF: Demonstrate Professional Customer Service Skills

Duty GG: Apply Communication Strategies Necessary and Appropriate for Effective Business Relations

Duty HH: Demonstrate Basic Academic Skills for Employees in Business

Duty II: Use the Principles of Planning, Management, and Organization

Duty JJ: Demonstrate Knowledge of Leadership

Duty KK: Complete an Employment Process

---

**Frequency:** represents how often the task is performed on the job. Frequency rating scales vary for different occupations. The rating scale used in this publication is presented below:

- 1 = less than once a week
- 2 = at least once a week
- 3 = once or more a day

**Criticality:** denotes the level of consequence associated with performing a task incorrectly. The rating scale used in this publication is presented below:

- 1 = slight
- 2 = moderate
- 3 = extreme

---

**DUTY A: Identify Types of Computers, How They Process Information, and How Individual Computers Interact With Other Computing Systems and Devices**

CODE	TASK	F/C
A.01	Categorize types of computers based on their size, power, and purpose	1/2
A.02	Identify types of microcomputers	1/1
A.03	Identify other types of computing devices	1/1
A.04	Identify the role of the central processing unit	1/1
A.05	Identify how the speed of the microprocessor is measured	1/2
A.06	Identify the role of types of memory and storage and the purpose of each, including RAM, ROM, and CD ROMs	2/2
A.07	Identify concepts related to how memory is measured, including bits, bytes, and megabytes	1/2
A.08	Identify the flow of information between storage devices (such as floppy or hard disks) to the microprocessor and RAM in relation to everyday computer operations	1/2
A.09	Identify the differences between large systems and desktop computers and appropriate uses for large vs. small systems	1/2
A.10	Identify that computers integrate into larger systems in a variety of ways	2/2
A.11	Identify how computers share data, files, hardware, and software	2/2

**DUTY B: Identify the Function of Computer Hardware Components**

CODE	TASK	F/C
B.01	Identify the types and purposes of external computer components, including standard input and output devices	2/2
B.02	Identify the types and purposes of internal computer components	2/2
B.03	Identify the types and purposes of specialized input devices (e.g. digital cameras and touch screens)	2/2
B.04	Identify the types and purposes of specialized output devices (e.g. projectors)	2/2
B.05	Identify the types and purposes of storage media (e.g. DVDs and network drives)	2/2
B.06	Identify ports used to connect input and output devices to a computer (e.g. USB ports and Ethernet ports)	2/2
B.07	Identify how hardware devices are installed on a computer system	2/2

**DUTY C: Identify the Factors That Go Into an Organizational Decision on How to Purchase Computer Equipment**

CODE	TASK	F/C
C.01	Identify criteria for selecting a personal computer	1/3
C.02	Identify factors that affect computer performance	1/3
C.03	Identify hardware and software considerations when purchasing a computer	1/3
C.04	Identify other factors that go into decisions to purchase a computer including warranties and support agreements	1/3

**DUTY D: Identify How to Maintain Computer Equipment and Solve Common Problems Relating to Computer Hardware**

CODE	TASK	F/C
D.01	Identify how to protect computer hardware from theft or damage	3/3
D.02	Identify factors that can cause damage to computer hardware or media (e.g. heat and humidity)	2/3
D.03	Identify how to protect computer hardware from fluctuation in the power supply, power outages, and other electrical issues	2/3
D.04	Identify common problems associated with computer hardware such as inoperable hardware devices	2/3
D.05	Identify common problems that can occur if hardware is not maintained properly	2/3
D.06	Identify maintenance that can be performed routinely by users such as cleaning and defragmenting hard drives	1/3
D.07	Identify maintenance that should ONLY be performed by experienced professionals	1/3
D.08	Identify the steps required to solve computer-related problems	2/3

**DUTY E: Identify How Software and Hardware Work Together to Perform Computing Tasks, and How Software is Developed and Upgraded**

CODE	TASK	F/C
E.01	Identify how hardware and software interact	1/3
E.02	Identify simple terms and concepts related to the software development process	2/3

E.03	Identify issues relating to software upgrades such as pros and cons, and methods to upgrade	2/3
------	---	-----

**DUTY F: Identify Different Types of Software, General Concepts Relating to Software Categories, and the Tasks to Which Each Type of Software is Most Suited or Not Suited**

CODE	TASK	F/C
F.01	Identify fundamental concepts relating to word processing and common uses for word processing applications	3/3
F.02	Identify fundamental concepts relating to spreadsheets and common uses for spreadsheet applications	3/3
F.03	Identify fundamental concepts relating to presentation software and common uses for presentation applications	3/3
F.04	Identify fundamental concepts relating to databases and common uses for database applications	3/3
F.05	Identify fundamental concepts relating to graphic and multimedia programs and common uses for graphic or multimedia software	3/3
F.06	Identify the types and purposes of different utility programs	3/3
F.07	Identify other types of software	2/3
F.08	Identify how to select the appropriate application(s) for a particular purpose, and problems that can arise if the wrong software product is used for a particular purpose	2/3

**DUTY G: Identify What an Operating System Is and How It Works, and Solve Common Problems Related to Operating Systems**

CODE	TASK	F/C
G.01	Identify the purpose of an operating system, and the difference between operating system and application software	2/3
G.02	Identify different operating systems including DOS, Windows, and Macintosh	2/3
G.03	Identify the difference between interacting with character-based and graphical operating systems	1/1
G.04	Identify the capabilities and limitations imposed by the operating system	1/1
G.05	Identify and solve common problems related to operating systems	1/2

**DUTY H: Manipulate and Control the Windows Desktop, Files, and Disks**

CODE	TASK	F/C
H.01	Identify elements of the Windows desktop	3/3
H.02	Manipulate windows such as minimizing windows	3/3
H.03	Shut down, logoff, and restart the computer	3/3
H.04	Use the Windows Start menu and Taskbar	3/3
H.05	Manipulate desktop folders and icons	3/3
H.06	Manage files using the Windows Explorer/File Manager	3/3
H.07	Identify precautions one should take when manipulating files including using	3/3

	standardized naming conventions	
H.08	Solve common problems associated with working with files	3/3

**DUTY I: Identify How to Change System Settings, Install, and Remove Software**

CODE	TASK	F/C
I.01	Display control panels	1/2
I.02	Identify different control panel settings	1/2
I.03	Change simple control panel settings such as date and time settings	1/2
I.04	Display and update a list of installed printers	1/2
I.05	Identify precautions regarding changing system settings	1/2
I.06	Install software including installing updates from online sources	1/2
I.07	Identify common problems associated with installing and running applications	1/2

**DUTY J: Be Able to Start and Exit a Windows Application, and Utilize Sources of Online Help**

CODE	TASK	F/C
J.01	Start a Windows application	3/3
J.02	Exit a Windows application	3/3
J.03	Identify and prioritize help resources, including online help within software and contacting a help desk	3/3
J.04	Use various forms of automated help	3/3

**DUTY K: Identify Common On-Screen Elements of Windows Applications, Change Application Settings, and Manage Files Within an Application**

CODE	TASK	F/C
K.01	Identify on-screen elements common to Windows applications (e.g. menus, toolbars and document windows)	2/2
K.02	Display or hide toolbars	2/2
K.03	Switch between open documents	3/3
K.04	Change views	2/2
K.05	Change magnification levels	1/1
K.06	Create files	3/3
K.07	Open files within an application and from the Windows desktop; identify file extensions including .xls or .doc	3/3
K.08	Save files in specified locations/formats	3/3
K.09	Close files	3/3
K.10	Identify and solve common problems relating to working with files (e.g. product or version incompatibility)	3/3

**DUTY L: Perform Common Editing and Formatting Functions**

CODE	TASK	F/C
L.01	Navigate around open files using scroll bars, keyboard shortcuts, etc.	3/3

L.02	Insert text and numbers in a file	3/3
L.03	Perform simple editing (e.g. cut, copy and move information)	3/3
L.04	Use the Undo, Redo, and Repeat commands	3/3
L.05	Find information	2/3
L.06	Replace information	2/3
L.07	Check spelling	3/3
L.08	Perform simple text formatting	3/3
L.09	Insert pictures into a file	2/3
L.10	Modify pictures in a file	2/3
L.11	Add drawn objects into a file, including creating and modifying objects	2/3

**DUTY M: Perform Common Printing Functions**

CODE	TASK	F/C
M.01	Format a document for printing	3/3
M.02	Preview a file before printing	3/3
M.03	Print files, specifying common print options	3/3
M.04	Manage printing and print jobs	3/3
M.05	Identify and solve common problems associated with printing	3/3

**DUTY N: Be Able to Format Text and Documents Including the Ability to Use Automatic Formatting Tools**

CODE	TASK	F/C
N.01	Identify on-screen formatting information, including breaks, paragraph markers etc.	3/3
N.02	Select word, line, paragraph, document	3/3
N.03	Change line and paragraph spacing	3/3
N.04	Indent text	3/3
N.05	Create and modify bulleted and numbered lists	2/3
N.06	Use outline structure to format a document	3/3
N.07	Insert symbols/special characters	2/3
N.08	Insert date and time	3/3
N.09	Insert, view, and print document comments	3/3
N.10	Display the ruler	3/3
N.11	Use tabs	3/3
N.12	Insert and delete a page break or section break	2/3
N.13	Insert, modify, and format page numbers	2/3
N.14	Create, modify, and format headers and footers	2/3
N.15	Create, modify, and format footnotes and endnotes	2/3
N.16	Apply borders and shading to text paragraphs	2/3
N.17	Create, modify, and apply styles	2/3
N.18	Copy formatting (Format Painter)	2/3
N.19	Use language tools	3/3

N.20	Use track changes in a document	1/2
N.21	Display document statistics	1/2

**DUTY O: Be Able to Insert, Edit, and Format Tables in a Document**

CODE	TASK	F/C
O.01	Create a table	2/3
O.02	Insert and edit data in a table	2/3
O.03	Modify table structure	2/3
O.04	Format tables	2/3
O.05	Sort data in a table	2/3

**DUTY P: Be Able to Modify Worksheet Data and Structure, and Format Data in a Worksheet**

CODE	TASK	F/C
P.01	Identify how a table of data is organized in a spreadsheet	2/3
P.02	Select information with the keyboard and mouse including selecting rows, columns, and worksheets	2/3
P.03	Insert and modify data	2/3
P.04	Modify table structure	2/3
P.05	Identify and change number formats, including currency, date and time, and percentage formats	2/3
P.06	Apply borders and shading to cells	2/2
P.07	Specify cell alignment (e.g. wrapping text within a cell)	2/3
P.08	Apply table AutoFormats	2/3

**DUTY Q: Be Able to Sort Data, Manipulate Data Using Formulas and Functions, and Add and Modify Charts in a Worksheet**

CODE	TASK	F/C
Q.01	Sort worksheet data	2/3
Q.02	Demonstrate an understanding of absolute vs. relative cell addresses	2/3
Q.03	Insert arithmetic formulas into worksheet cells	2/3
Q.04	Demonstrate how to use common worksheet functions (e.g. SUM, AVERAGE and COUNT)	2/3
Q.05	Insert formulas that include worksheet functions into cells	2/3
Q.06	Modify formulas and functions	2/3
Q.07	Use AutoSum	2/3
Q.08	Identify common errors made when using formulas and functions	2/3
Q.09	Draw simple conclusions based on tabular data in a worksheet	2/3
Q.10	Insert and modify charts in a worksheet	2/3
Q.11	Be able to identify if a presented chart accurately represents worksheet data shown in a table	2/3
Q.12	Identify appropriate chart types for presenting different types of information	2/3

**DUTY R: Be Able to Perform Basic Database Operations**

CODE	TASK	F/C
R.01	Design/modify a database	1/3
R.02	Open options	3/3
R.03	Print options	3/3
R.04	Add/delete/edit records	3/3
R.05	Create reports/forms using calculated fields	3/3
R.06	Close database/exit program	3/3
R.07	Perform queries	2/3

**DUTY S: Demonstrate Knowledge of Graphics Software**

CODE	TASK	F/C
S.01	Vector objects	1/2
S.02	Lines and curves	2/2
S.03	Fills, blends, and gradients	2/2
S.04	Front/back layering	2/2
S.05	Text manipulation	2/3
S.06	Bitmap/jpeg images	3/3
S.07	Paint effects	2/3
S.08	Paintbrush type, shade, and ink	2/2
S.09	Area textures and patterns	2/2
S.10	Selective image manipulation	2/2
S.11	Photo-image processing	2/2
S.12	File format conversion	2/3
S.13	Animation	2/2

**DUTY T: Be Able to Create and Format Simple Presentations**

CODE	TASK	F/C
T.01	Identify effective design principles for simple presentations	2/3
T.02	Manage slides (e.g. delete a slide)	2/3
T.03	Add information to a slide	2/3
T.04	Change slide view	2/3
T.05	Change slide layout	2/3
T.06	Modify a slide background	2/3
T.07	Assign transitions to slides	2/3
T.08	Change the order of slides in a presentation	2/3
T.09	Create different output elements (speaker's notes, handouts, etc.)	2/3
T.10	Preview the slide show presentation	2/3
T.11	Navigate an on-screen slide show	2/3

**DUTY U: Identify Network Fundamentals, and the Benefits and Risks of Network Computing**

CODE	TASK	F/C
U.01	Identify terminology relating to telecommunications, network, and the Internet	2/2
U.02	Identify types of networks	1/2
U.03	Identify how networks work	2/2
U.04	Identify benefits of networked computing	1/2
U.05	Identify the risks of networked computing	1/2
U.06	Identify fundamental principles of security on a network	1/3

**DUTY V: Identify the Relationship Between Computer Networks, Other Communications Networks (like the Telephone Network), and the Internet**

CODE	TASK	F/C
V.01	Identify the different ways the telephone system is used to transmit information	1/2
V.02	Identify that telecommunication devices such as modems convert information from analog to digital, and digital to analog formats	1/2
V.03	Identify the units used to measure data transmission rates	1/2
V.04	Identify the Internet as a "super network" of smaller computer networks, and that computers connect to the Internet via the "onramp" of a smaller computer network	1/2
V.05	Identify the hardware and software required to connect to the Internet	1/3
V.06	Identify different types of Internet connections and the advantages and disadvantages of each connection type	1/3
V.07	Identify the roles and responsibilities of an Internet Service Provider (ISP)	1/3

**DUTY W: Identify How Electronic Mail Works**

CODE	TASK	F/C
W.01	Identify how electronic mail works on a network and on the Internet	3/3
W.02	Identify the components of an electronic mail message	3/3
W.03	Identify the components of an electronic mail address	3/3
W.04	Identify when to use different electronic mail options	3/3
W.05	Identify different ways electronic mail is accessed	3/3
W.06	Identify the difference between standard electronic mail and other forms of messaging, such as paging or Instant Messaging	1/2

**DUTY X: Identify How to Use an Electronic Mail Application**

CODE	TASK	F/C
X.01	Read and send electronic mail messages	3/3
X.02	Identify ways to supplement a mail message with additional information	3/3
X.03	Manage attachments	3/3
X.04	Manage mail	3/3
X.05	Manage addresses	3/3
X.06	Identify the purpose of frequently used mail-configuration options	1/2

**DUTY Y: Identify the Appropriate Use of E-mail, and E-mail Related "Netiquette"**

CODE	TASK	F/C
Y.01	Identify the advantages of electronic mail	3/3
Y.02	Identify common problems associated with electronic mail	3/3
Y.03	Identify the elements of professional and effective e-mail messages	3/3
Y.04	Identify when other forms of correspondence are more appropriate than e-mail	2/2
Y.05	Identify when to include information from an original e-mail message in a response, as a method of tracking the "history" of e-mail communication	2/2
Y.06	Identify appropriate use of e-mail attachments and other supplementary information	2/3
Y.07	Identify issues regarding unsolicited e-mail ("spam") and how to minimize or control unsolicited mail	2/3
Y.08	Identify effective procedures for ensuring the safe and effective use of electronic mail	2/3

**DUTY Z: Identify Different Types of Information Sources on the Internet**

CODE	TASK	F/C
Z.01	Identify terminology related to the Internet	3/3
Z.02	Identify the purpose of a browser in accessing information on the World Wide Web	3/3
Z.03	Identify different elements of a Web site by their extensions, and the purposes of different types of sites	3/3
Z.04	Identify the difference between secure and unsecure Web sites (such as password-protected sites or sites secure for online transactions), and how to tell if a Web site is secure	3/3
Z.05	Identify different ways of communicating and corresponding via the internet	3/3

**DUTY AA: Be Able to Use a Web Browsing Application**

CODE	TASK	F/C
AA.01	Identify the make-up of a Web address/Uniform Resource Locator (URL)	3/3
AA.02	Navigate the Web using a browser	3/3
AA.03	Reload/Refresh the view of a Web page	3/3
AA.04	Show a history of recently visited Web sites, and delete the list of recently visited Web sites	3/3
AA.05	Find specific information on a Web site	3/3
AA.06	Manage Bookmarked sites/Favorite sites	3/3
AA.07	Save the content of a Web site for offline browsing	3/3
AA.08	Copy elements of a Web site including copying text or media to another application	2/3
AA.09	Print all or specified parts of a Web site	2/3
AA.10	Download a file from a Web site to a specified location	2/3
AA.11	Identify settings that can be modified in a Web browser application	1/3
AA.12	Identify problems associated with using a Web browser	1/3

**DUTY BB: Be Able to Search the Internet for Information**

CODE	TASK	F/C
BB.01	Identify the ways a search engine classifies and looks for Web sites	3/3
BB.02	Identify other ways of searching for information on the Web	3/3
BB.03	Use a search engine to search for information based on specified keywords	3/3
BB.04	Search effectively	3/3
BB.05	Identify issues regarding the quality of information found on the internet	3/3
BB.06	Identify how to evaluate the quality of information found on the Web	3/3

**DUTY CC: Identify How Computers Are Used in Different Areas of Work, School, and Home**

CODE	TASK	F/C
CC.01	Identify how computers and the Internet are used to collect, organize, and evaluate information and promote learning	2/3
CC.02	Identify the technology and processes involved with computers operating "behind the scenes" in everyday activities	2/3
CC.03	Identify the impact of electronic commerce (e-commerce) on business, individuals, and governments	2/3
CC.04	Identify technologies that support or provide opportunities to the disabled and disadvantaged such as voice recognition	2/3

**DUTY DD: Identify the Risks of Using Computer Hardware and Software**

CODE	TASK	F/C
DD.01	Identify how to maintain a safe working environment that complies with legal health and safety rules	2/3
DD.02	Identify injuries that can result from the use of computers for long periods of time	2/3
DD.03	Identify risks to personal and organizational data	3/3
DD.04	Identify software threats, including viruses and WORMS	3/3

**DUTY EE: Identify How to Use Computers and the Internet Safely, Legally, Ethically, and Responsibly**

CODE	TASK	F/C
EE.01	Identify reasons for restricting access to files, storage devices, computers, networks, and certain Internet sites	3/3
EE.02	Identify concepts related to intellectual property laws including copyrights, trademarks, and plagiarism	3/3
EE.03	Identify the principles regarding when information can or cannot be considered personal, including the difference between computer systems owned by schools or businesses that may have rules and guidelines as to who owns data stored on the system, and computers owned by individuals	3/3
EE.04	Identify how to avoid hazards regarding electronic commerce, including giving credit card information only to secure sites	3/3
EE.05	Identify how to protect privacy and personal security online, including understanding how Web sites track your activity online using "cookies" and other "behind-the-	3/3

	scenes" systems	
EE.06	Identify how to find information about rules regarding the use of computers and the Internet, including laws, use policies at school, and company guidelines at places of employment	3/3
EE.07	Identify how to stay informed about changes and advancements in technology	3/3
EE.08	Identify how to be a responsible user of computers and the Internet	3/3

**DUTY FF: Demonstrate Professional Customer Service Skills**

CODE	TASK	F/C
FF.01	Project appropriate business image <ul style="list-style-type: none"> <li>• Business dress</li> <li>• Nonverbal</li> <li>• Personal habits</li> <li>• Gestures</li> <li>• Hygiene</li> <li>• Etiquette</li> <li>• Develop and practice personal behaviors which reflect company culture</li> <li>• Positive attitude</li> </ul>	3/3
FF.02	Apply problem solving techniques and/or critical thinking skills <ul style="list-style-type: none"> <li>• Systematic problem solving</li> <li>• Employ appropriate skills for gathering and analyzing information</li> <li>• Interpret written, graphic, oral, and non-verbal instructions</li> <li>• Demonstrate good judgment</li> <li>• Creativity/open-minded</li> </ul>	3/3
FF.03	Develop self-improvement goals <ul style="list-style-type: none"> <li>• Educational</li> <li>• Professional</li> <li>• Personal</li> <li>• Long term</li> <li>• Short term</li> </ul>	2/3
FF.04	Demonstrate professional interpersonal skills <ul style="list-style-type: none"> <li>• Define customer/customer service</li> <li>• Identify and explain laws related to customer service</li> <li>• Define management's role in customer relations, communications, and staff development</li> <li>• Explain the concept of product/service mix</li> <li>• Promote business goodwill</li> <li>• Establish and maintain positive working relationships</li> <li>• Group building/teams</li> <li>• Develop job satisfaction</li> <li>• Maintain office protocol</li> <li>• Describe working environments and related technologies</li> <li>• Direct customer/client to other locations</li> </ul>	3/3

	<ul style="list-style-type: none"> <li>• Interpret business policies to customers/clients</li> <li>• Communication with internal and external customers</li> <li>• Demonstrate knowledge of the importance of good listening skills</li> <li>• Respect individual diversity</li> <li>• Display positive attitude</li> <li>• Show empathy toward others</li> <li>• Gather facts for total picture</li> <li>• Tact and diplomacy</li> <li>• Channel and control emotional reactions</li> <li>• Handle and resolve conflicts</li> <li>• Handle customer inquiries/complaints</li> <li>• Give and receive positive and constructive feedback</li> <li>• Provide constructive criticism or praise</li> <li>• Demonstrate ability to handle indifference</li> <li>• Demonstrate ability to handle objections</li> </ul>	
FF.05	<p>Apply business and work ethics</p> <ul style="list-style-type: none"> <li>• Integrity</li> <li>• Confidentiality</li> <li>• Honesty</li> <li>• Punctuality</li> <li>• Security</li> <li>• Responsibility</li> <li>• Initiative</li> <li>• Loyalty</li> <li>• Interest and enthusiasm</li> <li>• Trustworthiness</li> <li>• Self-control</li> <li>• Follow through with responsibilities</li> <li>• Avoid abuse of company assets</li> <li>• Avoid personal work on company time</li> <li>• Describe company structures and employees' role within that structure</li> <li>• Attendance</li> <li>• Meet organizationally defined expectations</li> <li>• Operate within scope of authority</li> <li>• Adhere to company rules, regulations, and policies</li> <li>• Distinguish between aggression vs. assertiveness</li> </ul>	3/3
FF.06	<p>Practice stress management skills</p> <ul style="list-style-type: none"> <li>• Identify factors that cause stress</li> <li>• In-house and outside resources</li> <li>• Basic ways to reduce stress</li> <li>• Separating home and work stress</li> <li>• Mental and physical effects</li> <li>• React positively to change</li> </ul>	3/3

	<ul style="list-style-type: none"> <li>• Maintain a positive attitude</li> <li>• Flexibility</li> </ul>	
FF.07	Practice awareness and skills to be an effective team member <ul style="list-style-type: none"> <li>• Team building concepts</li> <li>• Self-analysis/team analysis</li> <li>• Collaborate with stakeholders/partners</li> </ul>	3/3
FF.08	Practice awareness of safety and security measures <ul style="list-style-type: none"> <li>• Emergency procedures/crisis plans</li> <li>• Safety policies</li> <li>• Electrical cords</li> <li>• Fires</li> <li>• Weather</li> <li>• File drawers</li> <li>• Violent acts</li> <li>• Lifting</li> <li>• Material Safety Data Sheets (MSDS) and hazardous chemicals</li> <li>• Intruders</li> </ul>	3/3
FF.09	Practice appropriate ergonomic preventative measures <ul style="list-style-type: none"> <li>• Work space design</li> <li>• Environment</li> </ul>	3/3
FF.10	Deal with confidential information <ul style="list-style-type: none"> <li>• Tactful responses</li> <li>• Role of mediator</li> <li>• Gather information</li> <li>• Standard responses</li> <li>• React calmly</li> <li>• Guard privileged communication</li> </ul>	3/3
FF.11	Describe various types of compensation and benefit plans <ul style="list-style-type: none"> <li>• Bonus</li> <li>• Worker's Compensation</li> <li>• Insurance</li> <li>• Retirement</li> <li>• Investment options</li> <li>• Education reimbursement</li> </ul>	1/3

**DUTY GG: Apply Communication Strategies Necessary and Appropriate for Effective Business Relations**

CODE	TASK	F/C
GG.01	Compose and understand correspondence <ul style="list-style-type: none"> <li>• Letters</li> <li>• Memorandums</li> <li>• Research, develop, and compile reports</li> </ul>	3/3

GG.02	<p>Demonstrate styles and techniques for verbal and nonverbal communications</p> <ul style="list-style-type: none"> <li>• Effective listening</li> <li>• Oral</li> <li>• Diction</li> <li>• Body language</li> <li>• Presentation skills/organize presentation</li> <li>• Follow and give instructions</li> <li>• Written</li> <li>• E-mail</li> <li>• Fax</li> <li>• Sales techniques/persuasiveness</li> <li>• Integrate graphics/presentation software</li> <li>• Describe the difference between effective and ineffective communication</li> <li>• Use slang appropriately</li> <li>• Feedback</li> </ul>	3/3
GG.03	<p>Define and discuss communication barriers and factors of poor communication</p> <ul style="list-style-type: none"> <li>• Demographics</li> <li>• Communication styles</li> </ul>	2/3
GG.04	<p>Demonstrate proper phone techniques</p> <ul style="list-style-type: none"> <li>• Project positive telephone image</li> <li>• Screen calls</li> <li>• Place calls</li> <li>• Voice mail</li> <li>• Cell phones</li> <li>• Pagers</li> <li>• PDA's</li> <li>• Video teleconferencing</li> <li>• Transfer calls</li> <li>• Terminate calls</li> <li>• Monitor hold calls</li> <li>• Record and process messages</li> <li>• Gather information before calling</li> <li>• Conference calls</li> <li>• Meeting etiquette</li> </ul>	3/3
GG.05	<p>Use a wide variety of references and research resources such as</p> <ul style="list-style-type: none"> <li>• Electronic bulletin boards and information services</li> <li>• Computer networks</li> <li>• Internet/Intranet</li> <li>• Dictionary/Thesaurus</li> <li>• Software/hardware manuals</li> <li>• Telephone assistance and information</li> <li>• Company directory</li> <li>• Time zones</li> </ul>	3/3

	<ul style="list-style-type: none"> <li>• Postal resources</li> <li>• International dialing codes</li> <li>• Review locations on world map</li> </ul>	
--	--	--

**DUTY HH: Demonstrate Basic Academic Skills for Employees in Business**

CODE	TASK	F/C
HH.01	Apply appropriate reading comprehension skills	3/3
HH.02	Apply appropriate writing skills	3/3
HH.03	Apply appropriate math skills	3/3
HH.04	Apply appropriate communication skills	3/3

**DUTY II: Use the Principles of Planning, Organization, and Management**

CODE	TASK	F/C
II.01	Develop filing methods for internal/external customers	3/3
II.02	Practice time management and follow work schedule <ul style="list-style-type: none"> <li>• Establish/evaluate work priorities</li> <li>• Project/time management</li> <li>• Organize personal workloads</li> <li>• Assist in other duties within the business as needed</li> <li>• Develop and practice good work habits</li> </ul>	3/3
II.03	Identify strategic planning steps <ul style="list-style-type: none"> <li>• External analysis</li> <li>• Internal analysis</li> <li>• Mission</li> <li>• Goals</li> <li>• Strategies</li> <li>• Vision</li> </ul>	1/3
II.04	Identify and implement planning tools <ul style="list-style-type: none"> <li>• Goals</li> <li>• Budgets</li> <li>• Schedules</li> <li>• Standards</li> <li>• Policies</li> <li>• Procedures</li> <li>• Research</li> </ul>	2/3
II.05	Demonstrate understanding of organizational structure <ul style="list-style-type: none"> <li>• Responsibilities are delegated</li> <li>• Quality of work is evaluated</li> <li>• Chain of command is practiced</li> <li>• Effectively communicate across all organizational levels</li> </ul>	3/3
II.06	Work within the constraints of budgets <ul style="list-style-type: none"> <li>• Prepare/monitor budget</li> </ul>	2/3

II.07	Participate in long-range planning <ul style="list-style-type: none"> <li>• Expansion</li> <li>• Upgrades</li> <li>• Standards</li> <li>• Staffing</li> <li>• Committees</li> <li>• Visioning</li> </ul>	1/2
II.08	Identify and apply quality programs <ul style="list-style-type: none"> <li>• TQM</li> <li>• ISO</li> </ul>	1/2

**DUTY JJ: Demonstrate Knowledge of Leadership**

CODE	TASK	F/C
JJ.01	Identify leader characteristics <ul style="list-style-type: none"> <li>• Ethics</li> <li>• Intelligence</li> <li>• Judgment</li> <li>• Objectivity</li> <li>• Initiative</li> <li>• Take ownership of situations</li> <li>• Dependability</li> <li>• Cooperation</li> <li>• Honesty/Integrity</li> <li>• Courage</li> <li>• Confidence</li> <li>• Stability</li> <li>• Understanding</li> <li>• Creativity</li> <li>• Teamwork</li> <li>• Responsibility</li> <li>• Flexibility</li> </ul>	2/2
JJ.02	Identify leadership styles	1/2
JJ.03	Identify professional and community organizations <ul style="list-style-type: none"> <li>• Student organizations</li> <li>• Civic organizations</li> <li>• Professional organizations</li> <li>• Social organizations</li> </ul>	2/2
JJ.04	Participate in student organization activities and various projects on the local, state, and national levels	2/2

**DUTY KK: Complete an Employment Process**

<b>CODE</b>	<b>TASK</b>	<b>F/C</b>
KK.01	Set occupational objectives such as - <ul style="list-style-type: none"><li>• Entrepreneurship</li><li>• Self-employment</li><li>• Full-time</li><li>• Part-time</li></ul>	2/3
KK.02	Compose a letter of application	1/3
KK.03	Create a resume <ul style="list-style-type: none"><li>• Hard copy</li><li>• Electronic format</li></ul>	1/3
KK.04	Create a portfolio <ul style="list-style-type: none"><li>• Hard copy</li><li>• Electronic format</li></ul>	
KK.05	Review potential interview questions and techniques	1/3
KK.06	Formulate responses to simulated situations <ul style="list-style-type: none"><li>• Mock interview</li><li>• Prepare questions for prospective employers</li></ul>	1/3
KK.07	Participate in job interview <ul style="list-style-type: none"><li>• Job interview etiquette</li><li>• Application form</li><li>• Appropriate dress</li><li>• Submit an original copy of resume</li><li>• Research company history</li></ul>	1/3
KK.08	Complete post-interview activities <ul style="list-style-type: none"><li>• Follow-up thank you letter</li><li>• Follow-up inquiry call</li></ul>	1/3
KK.09	Demonstrate knowledge of available employment services <ul style="list-style-type: none"><li>• Online searches</li><li>• Private</li><li>• State</li><li>• Federal</li></ul>	1/3
KK.10	Complete job acceptance <ul style="list-style-type: none"><li>• Negotiate salary</li><li>• Negotiate benefits</li><li>• Complete benefits forms</li></ul>	1/3
KK.11	Discuss legal issues <ul style="list-style-type: none"><li>• Drug screen</li><li>• Discrimination</li><li>• Harassment</li></ul>	1/3
KK.12	Compare and evaluate career and training opportunities <ul style="list-style-type: none"><li>• Networking</li><li>• Professional organizations</li></ul>	2/2

	<ul style="list-style-type: none"> <li>• Educational requirements</li> <li>• Salaries</li> <li>• Projected labor market</li> <li>• Career/job ladder</li> <li>• Self-initiative</li> <li>• Transfer skills</li> <li>• Flexibility</li> <li>• Major functions of a company and job levels within these functions</li> </ul>	
KK.13	Demonstrate knowledge of resignation, termination, and exit interview practices	1/3