**Course Number:**  8169 (OK Promise Approved)

**Pre-requisite:**  None

**Career Clusters:** Business Management and Administration; Finance; Hospitality and Tourism; Information Technology; and Marketing

**Location:**  Various locations across Oklahoma

**Length:**  1 Carnegie Unit (equivalent to 120 clock hours)

**Course Description:**

This course provides students with fundamental concepts, principles, and ideas needed to understand how business is operated and managed in a rapidly changing technical environment. It provides job readiness skills and soft skills critical for success in any workplace setting.

**Specific Learning Competencies** **–** *Upon successful completion of this course, the student will be able to:*

Frequency and Criticality scales (F:C) denoted at the end of each competency, are explained as follows:

**Frequency:**(first number) represents how often the task is performed on the job. The rating scale used in this publication: 1 = less than once a week, 2 = at least once a week, 3 = once or more a day

**Criticality:**(second number) denotes the level of consequence associated with performing a task incorrectly. The rating scale used in this publication: 1 = slight, 2 = moderate, 3 = extreme

Duty A: Mobile Devices

|  |
| --- |
| * Classify cellular phone connections and carriers (1:3)
* Compare cellular vs. Wi-Fi-enabled devices and connection limitations (1:3)
* Understand smart phone functions and limitations (3:3)
* Understand the use of phones in a professional setting (3:3)
* Differentiate between SMS and MMS text messaging and multiple platforms (1:1)
* Configure location services and notifications (3:3)
 |

**Duty B: Intro to App Culture**

|  |
| --- |
| * Understand how apps are obtained (must have an account,) app stores, purchasing apps with a credit card, in-app purchases, how to use an app store (2:2)
* Identify different app types (3:3)
 |
| * Compare strengths and limits of web applications vs. local applications (1:1)
 |

**Duty C: Hardware Devices**

|  |
| --- |
| * Identify types of devices (i.e. server, laptop, desktop, tablets, etc.) (1:2)
* Identify impact of memory and storage for device usage (1:2)
* Connect and use different peripherals: camera, audio, microphone, USB devices, printer, external display and necessary device ports (3:3)
* Identify Ethernet usage (1:2)
* Connect a wireless device to a network (Wi-Fi) (1:1)
* Understand power management and power settings (1:1)
* Understand driver concepts as well as their device compatibility and updates (1:2)
* Compare platform implications and considerations (i.e. Mac, PC, Linux, iOS, Android, Firmware) (1:2)
* Compare platform compatibility for cellular, Wi-Fi, and wired (1:3)
* Understand concepts for connecting devices to the internet (1:2)
* Understand common hardware configurations (1:1)
* Compare the pros and cons of touch screens vs non-touch screen devices (1:1)
 |

**Duty D: Computer Software**

|  |
| --- |
| * Understand operating system versioning and update awareness (1:2)
 |
| * Compare concepts surrounding applications vs. operating system vs. global settings (1:1)
 |
| * Understand operating systems and software settings (1:2)
* Understand software preferences/settings (1:1)
* Understand users and profiles (2:3)
* Understand file structures and file/folder management, including image files (3:3)
* Navigate menu options (3:3)
* Troubleshoot software issues (2:3)
* Identify use of global positioning system (GPS) and geographic information system (GIS) in society (1:1)
 |

**Duty E: Backup and Restore**

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| --- |
| * Understand local data backup and restore functions (1:2)
* Differentiate use of backup (find a lost file) and restore (fix settings) (1:2)
 |
| * Understand steps to complete a full system restore on a personal device (1:2)
 |
|  |

**Duty F: File Sharing**

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| --- |
| * Understand ways to transfer files, attachments, links, shared folders, and compressed files (3:3)
* Understand PDF usage for file sharing (1:3)
 |

**Duty G: Cloud Computing**

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| --- |
| * Understand cloud concepts (3:3)
 |
| * Identify benefits of using cloud storage (3:3)
 |
| * Access and use the cloud to upload, download, and sync (3:3)
 |
| * Differentiate web applications vs. local applications, including subscription services (3:3)
 |
|  |

**Duty H: Security**

|  |
| --- |
| * Understand basic account management (3:3)
 |
| * Understand basic threats to security of computers, data, and identity (3:3)
 |
| * Understand implications of monitoring software (i.e. surveillance) (3:3)
 |
| * Differentiate connecting to secured vs. unsecured network (i.e. wired and wireless) (3:3)
 |
| * Understand importance of anti-virus software usage (3:3)
* Understand firewalls and basic settings (3:3)
* Identify e-commerce interactions and best purchasing practices (1:1)
* Define virtual private networks (VPNs) (1:1)
 |

**Duty I: Common Application Features**

|  |
| --- |
| * Demonstrate copy, cut, and paste keyboard equivalents (3:3)
 |
| * Compare differences between plain text and HTML (i.e. text with markup) (3:3)
 |
| * Use spell check (3:3)
 |
| * Use review features (3:3)
 |
| * Demonstrate find/replace (3:3)
 |
| * Select text or cells (3:3)
 |
| * Demonstrate redo and undo (3:3)
 |
| * Demonstrate drag and drop (3:3)
* Understand read-only view (3:3)
* Understand protected mode (3:3)
* Demonstrate magnification (3:3)
 |

**Duty J: Hands On – Word Processing Activities**

|  |
| --- |
| * Perform basic formatting skills (3:3)
 |
| * Adjust margins, page sizes, page orientation, and other page layout concepts (3:3)
 |
| * Change text sizes and font styles (3:3)
 |
| * Create and save files (3:3)
 |
| * Print a document (3:3)
* Understand print views (3:3)
* Use review options (3:3)
* Create tables (3:3)
* Understand file types that are compatible or editable with word processors (3:3)
 |
| **Duty K: Hands On – Spreadsheet Activities*** Understand common spreadsheet terms (2:3)
* Insert/delete rows and columns (2:3)
 |
| * Modify cell sizes (2:3)
* Filter and sort data (2:3)
* Understand functions, formulas, and operators (2:3)
* Enter data (2:3)
* Use and create charts (2:3)
* Create tables (2:3)
* Manipulate data (2:3)
* Format data (2:3)
* Understand print preview, print, and other page formatting (2:3)
* Understand compatible spreadsheet file types (i.e. csv, xIsx, tab delimited) (2:3)
* Use spreadsheet templates to increase productivity (2:3)
* Understand use of spreadsheet as a simple database (2:3)
 |
| **Duty L: Hands On – Database Activities** |
| * Define data (1:1)
 |
| * Understand how websites utilize databases (1:1)
 |
| * Identify basic concepts of a relational database (1:1)
 |
| * Define metadata (1:1)
 |
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**Duty M: Hands On – Presentation Activities**

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| * Understand file types compatible with presentation software (2:3)
 |
| * Understand how to connect external/extended monitors to display presentation (2:3)
* Use presentation views and modes (2:3)
* Add animations, effects, and slide transitions (2:3)
 |
| * Create and organize slides (2:3)
 |
| * Design slides (2:3)
* Identify presentation software options (2:3)
 |

**Duty N: Introduction to Digital Media**

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| --- |
| * Import and insert images into documents (3:2)
 |
| * Crop images (2:2)
* Identify different types of multimedia (i.e. print, film, video) (1:2)
 |
|  |
| **Duty O: Online Functionality** |
| * Understand email basics (3:3)
* Create calendar events and appointments (3:3)
 |
| * Understand digital identity and cyber bullying in social media (3:3)
 |
| * Understand best communication tools (3:3)
 |
| * Understand virtual meeting options (2:2)
 |
| * Demonstrate effective online searches (3:3)
* Understand implications of copyright violations (3:3)
* Identify virtual reality (VR) uses and applications (1:1)
* Demonstrate appropriate internet etiquette (3:3)
* Validate internet resources (2:2)
* Research and validate new technologies (1:1)
 |

**Duty P: Introduction to Webpage Development**

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| --- |
| * Understand basic concepts of webpage development (1:3)
* Understand HTML/CSS in webpage development (1:3)
 |

**Duty Q: Smart Technology**

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| --- |
| * Understand use of artificial intelligence (AI) in technology (1:3)
 |
| * Define Internet of Things (IoT) as used to connect and operate devices (2:3)
* Identify the ethical issues related to the use of smart technology (1:3)
* Identify use of drones in society (1:2)
 |

**Duty R: Introduction to Programming**

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| --- |
| * Define algorithms (1:1)
 |
| * Create a simple program (2:3)
 |

**Duty S: Introduction to Leadership**

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| --- |
| * Identify leader characteristics (i.e. ethics, intelligence, objectivity, initiative, accountability, dependability, cooperation, integrity, courage, confidence, stability, empathy, creativity, teamwork, responsibility, flexibility) (2:2)
* Identify leadership styles (2:2)
* Identify professional and community organizations (i.e. student organizations, civic organizations, professional organizations, social organizations) (2:2)
* Participate in student organization activities and various projects on the local, state, and national levels (2:2)
 |

**Duty T: Introduction to Employment Process**

|  |  |
| --- | --- |
| * Set occupational objectives (i.e. entrepreneurship, self-employment, full-time, part-time) (1:3)
 |  |
| * Compose a letter of application (1:3)
 |  |
| * Create a résumé and portfolio in hard copy and digital format (1:3)
* Demonstrate knowledge of employment services (i.e. online searches, private, state, federal) (1:3)
 |  |
| * Review potential interview questions and techniques (1:3)
 |  |
| * Participate in pre-interview activities (i.e. mock interview, preparing questions for prospective employers) (1:3)
 |  |
| * Participate in job interview (i.e. interview etiquette, application, appropriate dress, résumé, research company history) (1:3)
 |  |
| * Complete post-interview activities (i.e. follow-up letter and inquiry call) (1:3)
 |  |
| * Complete job acceptance (i.e. negotiate salary and benefits, complete benefits forms) (1:3)
 |  |
| * Discuss legal issues (i.e. drug screen, discrimination, harassment) (1:3)
 |  |
| * Identify career and training opportunities (i.e. networking, professional organizations, education requirements, salaries, labor market, career ladder, self-initiative, transfer skills and flexibility, functions/job levels of a company) (1:3)
 |  |
| * Demonstrate knowledge of resignation, termination, and exit interview practices (1:3)
 |  |

**Duty U: Employability Skills**

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| --- |
| * Demonstrate effective communication skills (2:3)
* Demonstrate ability to present in front of a group (1:3)
 |
| * Demonstrate time management skills (3:3)
* Understand remote workforce implications (2:3)
* Understand impact of multigenerational and diverse workforce (2:3)
 |
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**Instruction:** (based on a typical 175-day school year with 45-minute class periods)

30 Class Periods Theory

115 Class Periods Lab

30 Class Periods Certification Preparation and Attainment

**Methods of Instruction include:**

*(Choose method(s) of instruction – examples are: lectures, class discussions, hands-on training, demonstrations, projects and performance evaluation.)*

|  |  |
| --- | --- |
| **Required Testing:** | (Select one certification test from the following options): |
| Industry (Certiport):  | * IC3Certifications (0905)
 |
| ODCTE: | * Fundamentals of Technology (0901)
 |
| SHL TalentCentral (choose one):  | * Computer Fundamentals (0951)
* Basic Computer Literacy (0969)
 |
|  Precision Exams (choose one): TestOut:  | * Computer Technology I (0902)
* Information Technology, Introduction (1108)
* Digital Business Applications (0215)

 * Office Pro (0149)
 |

**Recognized Course Textbooks and Instructional Resources:**

* Computer Literacy BASICS: A Comprehensive Guide to IC3 by Morrison, Wells & Ruffolo.
* Our Digital World: Introduction to Computing, Paradigm Publishing.
* Shelly Cashman Discovering Computers & Microsoft Office 365 & Office 2016: A Fundamental Combined Approach**,** Cengage Learning
* Business Communications, Thomas Means, Cengage Learning
* Learning Microsoft Office Level 1, Joyce Nielson, Janice A Snyder, and Suzanne Welxel

**Online:**

* <https://ctyou.org/course/index.php?categoryid=248>
* <https://www.icevonline.com/curriculum>
* <http://www.techsoup.org/support/articles-and-how-tos>
* LearnKey: [www.learnkey.com](http://www.learnkey.com)
* Teknimedia, Online Learning Portal
* <http://www.gcflearnfree.org/topics>
* <http://www.freetech4teachers.com/p/google-tools-tutorials.html#.WZc639GQzcs>
* <https://khanacademy.org>
* [https://applieddigitalskills.withgoogle.com/s/en/home](https://applieddigitalskills.withgoogle.noclick_com/s/en/home) (requires Google account)

**Career Unit:**

* Career Ready 101/KeyTrain, Online Curriculum
* OkCareerGuide.org: <https://okcareerguide.kuder.com/>
* The Job Hunting Handbook, Dahlstrom
* <https://www.virtualjobshadow.com>
* [https://www.bls.gov/k12/students/careers/career-exploration.htm](https://www.bls.noclick_gov/k12/students/careers/career-exploration.htm)
* <http://www.gcflearnfree.org>
* <https://www.icevonline.com>

**Computer Parts:**

* <http://www.computerhope.com/>
* <http://www.techterms.com/>
* <http://fcit.usf.edu/Network/chap1/chap1.htm>
* <http://www.gcflearnfree.org>
* <https://www.icevonline.com>

**Windows:** Microsoft Windows Introductory, Shelly Cashman Series, Freund, Enger, Hoisington, Course Technology, Cengage Learning

**Microsoft Office:**

* Cable/Freund/Monk/Sebok/Starks/Vermaat - MindTap Shelly Cashman MindTap™ Office 365™ & Office 2019 Collection (K12 Instant Access) 0357119185 | 9780357119181
* Beskeen/Cram/Duffy/Friedrichsen/RWermers - MindTap Illustrated Collection Office 365/Office 2019(K12 Instant Access 0357119681 | 9780357119686)
* Shelly Cashman Microsoft Office 365 & Office 2016: Introductory**,** Cengage Learning

**Email:**

* <http://www.gcflearnfree.org/emailbasics>
* <https://www.icevonline.com>

**Internet:**

* <http://www.google.com/insidesearch/searcheducation/lessons.html>
* <http://www.gcflearnfree.org/internet>
* <https://www.icevonline.com>
* <http://www.sc.edu/beaufort/library/pages/bones/bones.shtml>
* <http://www.flashcardmachine.com/machine/?read_only=842564&p=a21p>
* ctYOU.org BMITE Teacher Resources: <https://ctyou.org/mod/book/view.php?id=1268>
* EAST Initiative: <http://www.eastinitiative.org/>
* IT Career Cluster Resources: <http://www.careerclusters.org/information-technology>

**Safety:**

* <http://www.gcflearnfree.org/internetsafety>
* ctYOU.org (safety courses developed for teachers to use) <https://ctyou.org/course/view.php?id=38&section=7>
* <http://www.commonsensemedia.org>
* <https://www.icevonline.com>

**References:**

* Gregg Reference Manual, McGraw-Hill
* Your Attitude Counts, Neild B. Oldham, EMC/Paradigm, 1990
* The Public Domain: How to Find & Use Copyright-Free Writings, Music, Art & More, Stephen Fishman
* <https://www.classdojo.com/resources>

**Coding:**

* <https://www.csfirst.with.google.com> (requires Google account)
* <https://www.code.org>
* <https://codecombat.org>
* <https://codehs.org>
* <https://codeacademy.org>
* <http://www.gcflearnfree.org>
* <https://www.icevonline.com>
* <https://khanacademy.org>