**Appendix A2**

**WORK PROCESS SCHEDULE**

**AND**

**RELATED INSTRUCTION OUTLINE**

**DEVELOPED BY**

**United States Help Desk Academy**

**FOR THE OCCUPATION OF**

**Computer User Support Specialist: Help Desk Technician**

**O\*NET-SOC CODE: 15-1232.00 RAPIDS CODE: 2018CB**

**Appendix A2**

**Computer User Support Specialist: Help Desk Technician**

**O\*NET-SOC CODE: 15-1232.00 RAPIDS CODE: 2018CB**

This schedule is attached to and a part of these Standards for the above identified occupation.

# APPRENTICESHIP APPROACH

☐ Time-based ☒ Competency-based ☐ Hybrid

# TERM OF APPRENTICESHIP

The term of the apprenticeship is reasonably expected to be completed within one year with an on-the-job learning (OJL) attainment of all competencies of the position, supplemented by the minimum recommended 244 hours of related instruction.

# RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice to 1 Journeyworker.

# APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: $21.67.

|  |  |  |
| --- | --- | --- |
| **Period** | **Percent of Journeyworker Wage** | **Wage (Hourly)** |
| 1st | 78% | $17.00 |
| 2nd | 90% | $19.45 |

# PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of 25% of the OJL hours which equals 500 hours.

# SELECTION PROCEDURES

Applicants will be accepted throughout the year or as specified by the employer. Every person requesting an application will have one made available upon signing the applicant log.

All applications will be identical in form and requirements. The application form will be numbered in sequence corresponding with the number appearing on the applicant log so that all applications can be accounted for. Columns will be provided on the applicant log to show race, ethnicity, and sex and the progress by dates and final disposition of each application.

Before completing the application, each applicant will be required to review the Apprenticeship Standards and will be provided information about the program. If the applicant has any additional questions on the qualifications or needs additional information to complete the application, it will be provided by the sponsor.

Receipt of the properly completed application form along with required supporting documents (driver's license, birth certificate, or other acceptable proof of age; copy of high school diploma, GED certificate, or other acceptable documentation of education) will constitute the completed application.

Completed applications will be checked for minimum qualifications. Applicants deficient in one or more qualifications or requirements or making false statements on their applications will be notified in writing of their disqualification and of the appeal rights available to them. No further processing of such applications will be taken.

Applicants meeting the minimum qualifications and submitting the required documents will be notified where and when to appear for an interview (if applicable).

The sponsor may select apprentices from a pool of eligible applicants on the basis of the rank order of their scores on one or more qualification standards where there is a significant statistical relationship between rank order of scores and performance in the apprenticeship program. The selection of any qualification standards beyond minimum legal working age, the use of oral interviews, the notification of applicants, and the establishment of goals for the admission of minorities and women (minority and nonminority) into the pool of eligibles must proceed in accordance with the requirements of 29 CFR § 30.S(b)(l) and NAC 610.845. The method of rating is listed by each employer.

An individual who has completed a structure pre-apprenticeship training program that meets the requirements outlined in Training and Employment Notice 13-12, Defining a Quality Pre-Apprenticeship Program and Related Tools and Resources, in any occupational area covered in these standards of apprenticeship and who meets the minimum qualifications of the apprenticeship program may be admitted directly into the program. The candidate shall provide official documentation confirming that he or she fulfilled the specific requirements of the pre-apprenticeship program, such as completion/graduation certificates, transcripts, notarized letters of confirmation, and sworn statements.

The sponsor will evaluate the training received to grant appropriate credit on the term of apprenticeship. Entry of pre-apprenticeship candidates shall be done without regard to race, color, religion, national origin, or sex. (Note: This is a method of direct entry into the apprenticeship program.)

**WORK PROCESS SCHEDULE**

**Computer User Support Specialist: Help Desk Technician**

**O\*NET-SOC CODE: 15-1232.00 RAPIDS CODE: 2018CB**

**Description:**  A Computer User Support Specialist provides technical assistance to computer users. Answers questions or resolves computer problems for clients in person, via telephone, or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

The term of the apprenticeship shall be defined by the attainment of competencies, both technical and behavioral, of the apprenticeship as listed in the tables reasonably within one year of OJL.

Competency in the work processes outlined herein can be demonstrated through a variety of venues including: observation, proficiency demonstration/aptitude exam, questions and answers, learner’s products, simulations, project work, and/or mentor testimony or evidence as demonstrated on the job.

United States Help Desk Academy will assess each apprentice’s prior experience to determine what credit for advanced standing will be awarded for work processes schedule (WPS) and Related Instruction (RI). Prior experience will be assessed through resumes, interviews, previous job assignments and/or demonstration of competencies. Assigned mentors will assess apprentices for credit for prior experience at any time during the probationary period.

**Apprenticeship Competencies – Technical**

**Evaluation Matrix**

**Work Processes Assessment**

The following is a sample recommended rating system to determine competency. Mentors may utilize an equivalent tool, such as a learning plan, for documenting competency. Assessments will occur not less frequently than the wage schedule periods indicated.

|  |  |  |
| --- | --- | --- |
| **Rating System** | **Description** | **Points** |
| Exceeds All Expectations | Consistently exceeds performance standard established for the time in position. Achieves results above and beyond what is required. Extends themselves in their roles to exceed personally and as a team to achieve exceptional results. | 5 |
| Meets & Exceeds Some Expectations | Employee not only meets all expectations in a fully satisfactory way but exceeds some of the objectives. | 4 |
| Meets Expectations | Consistently meets the performance standards established for time in position. Handles routine tasks & some unexpected situation with the usual amount of supervision. Can continue to develop with coaching, advanced training or more experience | 3 |
| Meets Some Expectations | Employee occasionally meets some of the objectives related to this goal but does not meet others in a fully satisfactory way. This performance level generally indicates the need for additional coaching, training or other plan for performance improvements. | 2 |
| Does Not Meet / Meets Some Expectations | Does not consistently meet performance standards established for time in position. Requires basic training, coaching or experience to improve performance and become consistent. Additional follow up will be necessary. | 1 |

**WORK PROCESS SCHEDULE**

The following are the core Computer User Support Specialist related work processes for the apprenticeship.

|  |  |  |  |
| --- | --- | --- | --- |
| **Job Function 1: Sets up and removes employee or client workstations or devices, including setting up access controls** | **Rating** | **Validated by**  **Initials** | **Date** |
| Sets up desktop, laptop and other devices for employees |  |  |  |
| Installs software on network or individual users' computers, laptops or devices and sets appropriate access controls or authorities |  |  |  |
| Sets up user identifications and passwords and implements policies regarding passwords and user/administrator permissions |  |  |  |
| Establishes secure external connections to network or desktops using secure remote access technology |  |  |  |
| Installs printers on networks or individual devices |  |  |  |
| Sets up network map, employee folders and centralized data repositories |  |  |  |
| Sets up email account for users and establishes storage limits and backup parameters |  |  |  |
| Maintains and manages software licenses |  |  |  |
| Removes users from network, archives data and files, removes workstations and disables devices for users exiting the organization or prohibited from using IT resources |  |  |  |
| **Job Function 2: Installs, provides user support for, or troubleshoots hardware and commercial software** | **Rating** | **Validated by**  **Initials** | **Date** |
| Uses FAQ's or other job aids to troubleshoot hardware or software faults |  |  |  |
| Uses logic to discover source of faults and recommends appropriate solutions |  |  |  |
| Demonstrates ability to use basic software, including set-up of preferred default settings, instructs other users on the basic features of standard software packages, and identifies and remedies typical faults in relevant software packages |  |  |  |
| Identifies situations in which the fault must be escalated to a higher-level technology support individual, including an outside vendor |  |  |  |
| Contacts outside vendors or vendor-supported help desk to solve difficult problems or procure software patches |  |  |  |
| Prioritizes "tickets" or requests for help based on business need, staff hierarchy or urgency of problems |  |  |  |
| **Job Function 3: Supports internal or external clients in the use of audio/visual technology and conference technology** | **Rating** | **Validated by**  **Initials** | **Date** |
| Sets up and links audiovisual equipment, including projectors, screens, laptops, cameras and related device |  |  |  |
| Installs, launches, operates and troubleshoots software designed to facilitate presentations, web-based conferencing and audioconferencing |  |  |  |
| Tests equipment and software prior to use to ensure sound and video quality is acceptable |  |  |  |
| Sets up, schedules and manages web-based or video conferences |  |  |  |
| Provides support to users during meetings, conferences or webinars |  |  |  |
| Sets up user accounts on voice technologies or systems, including voicemail |  |  |  |
| Serve as the first point of contact to customers seeking help for hardware, software, network, or other technical and non-technical issues. |  |  |  |
| Provide over-the-phone, email, and chat support |  |  |  |
| Identify, diagnose, and resolve all customer issues by using documented troubleshooting items such as a knowledge base, previously reported issues, colleague experience, or connecting the customer to an escalated level of support to properly resolve their issue |  |  |  |
| Use of screen sharing and remote control tools to properly vet, collect, and evaluate the customer's reported issue |  |  |  |
| Properly ticketing all customer requests with detailed information regarding the issue reported. Help Desk Analysts are expected to provide accurate, descriptive, and complete information in all tickets in order to successfully relay informits action back to the customer or other support team members. |  |  |  |
| Maintain a regular and reliable level of attendance |  |  |  |
| **Job Function 4: Installs, maintains and troubleshoots networks** | **Rating** | **Validated by**  **Initials** | **Date** |
| Installs and maintains wired and wireless networks |  |  |  |
| Connects devices to networks physically and using remote access technologies |  |  |  |
| Installs network security software and devices and monitors system for signs of hacking, intrusion or viruses |  |  |  |
| Tests resiliency of security devices or software and monitors bandwidth utilization |  |  |  |
| Establishes and sets access levels and permissions based on employees' job roles and company policies |  |  |  |
| Assists in setting up, configuring and managing servers including data storage |  |  |  |
| Sets up user identification parameters on servers |  |  |  |
| Assists in monitoring server use, efficacy of data back-up and storage systems and integrity of redundant systems or technologies |  |  |  |
| **Job Function 5: Makes minor software modifications to improve performance or customize to user needs** | **Rating** | **Validated by**  **Initials** | **Date** |
| Surveys user needs to understand what modifications are needed |  |  |  |
| Modifies a program within a software package, including securing permission from vendors to do so |  |  |  |
| Inserts or loads organizational templates or standards into software, such as presentation templates in PowerPoint or equivalent software |  |  |  |
| Uses software to set up needed business functions, such as workflows, tracking, archiving or other functions |  |  |  |
| **Job Function 6: Assists in maintaining or updating web content and manages user access profiles** | **Rating** | **Validated by**  **Initials** | **Date** |
| Sets user/author access permissions based on organization's policies |  |  |  |
| Uploads new content to organization's website or removes old content as instructed |  |  |  |
| Tests functionality of links embedded in the website |  |  |  |
| Notifies appropriate person if incorrect, outdated or otherwise problematic content is identified |  |  |  |
| Notifies appropriate person if website is not functioning properly |  |  |  |
| **Job Function 7: Monitors and helps maintain network security by adhering to security policies** | **Rating** | **Validated by**  **Initials** | **Date** |
| Monitors adherence to password policies, including enforcement of password update intervals |  |  |  |
| Sets user access levels and permissions based on organizational policies |  |  |  |
| Monitors antiviral software to understand potential threats and updates as needed |  |  |  |
| Reads, attends conferences or interacts with other IT professionals to know and understand current threat levels and mechanisms |  |  |  |
| Ensures that encryption technology and access controls are utilized to protect sensitive data |  |  |  |
| Ensures that off-site staff are using secure connections to access network |  |  |  |
| Assists in or monitors use of back-up technologies and network redundancies to minimize risk |  |  |  |

A combination of the above work processes will be reasonably completed within one year of OJL in the apprenticeship. Based on the apprentice’s work assignment, the time spent in each of the work processes will vary.

The above on-the-job-training (OJT) work process schedule is intended as a guide. The WPS need not be followed in any sequence, and it is understood that some adjustments may be necessary in the percentage of time spent in each of the work processes to allow for different work experiences. In all cases, the apprentice is to receive sufficient work experiences to make them fully competent and use good workmanship in all work processes, which are a part of the industry. In addition, the apprentice shall be fully instructed in safety and OSHA requirements.

**Apprenticeship Competencies – Behavioral**

In addition to mastering all of the essential technical competencies, an apprentice must consistently demonstrate at an acceptable level the following behavioral competencies in order to complete the apprenticeship.

|  |  |
| --- | --- |
| **Item #** | **Behavioral Competencies** |
| **1.** | Participate and focus in team discussions/meetings |
| **2.** | Able to work independently |
| **3.** | Openness to new ideas and change |
| **4.** | Ability to deal with ambiguity by exploring, asking questions, etc. |
| **5.** | Knows when to ask for help |
| **6.** | Able to demonstrate effective presentation skills |
| **7.** | Able to demonstrate effective communication skills individually and in group settings |
| **8.** | Maintains an acceptable attendance record |
| **9.** | Reports to work on time |
| **10.** | Completes assigned tasks on time |
| **11.** | Uses appropriate language |
| **12.** | Demonstrates respect for students, co-workers and supervisors |
| **13.** | Demonstrates trust, honesty and integrity |
| **14.** | Requests and performs work assignments without prompting |
| **15.** | Appropriately cares for personal dress, grooming and hygiene |
| **16.** | Maintains a positive attitude |
| **17.** | Collaborate with and assists co-workers |
| **18.** | Follows instructions/directions |
| **19.** | Able to work under supervision |
| **20.** | Able to self-reflect and accept constructive feedback and criticism |
| **21.** | Able to follow safety rules |
| **22.** | Able to take care of equipment and work place |
| **23.** | Able to keep work area neat and clean |
| **24.** | Able to meet supervisor's work standards |
| **25.** | Able to not let personal life interfere with work |
| **26.** | Adheres to work policies/rules/regulations |

**RELATED INSTRUCTION OUTLINE**

**Computer User Support Specialist: Help Desk Technician**

**O\*NET-SOC CODE: 15-1232.00 RAPIDS CODE: 2018CB**

The related instruction has been developed by the employer as part of the Computer User Support Specialist apprenticeship. This instruction shall include a minimum recommended 244 hours of related instruction (RI) throughout the apprenticeship. The curriculum is defined as a variety of courses, including self-directed web-based courses with oversight by a trainer, around which the projects and assessments are based. By defining the RI this way, all competencies required of the apprentices are met, through project work.

United States Help Desk Academy will assess each apprentice’s prior learning to determine what credit will be awarded for the RI, as well as for meeting the prerequisite and completion requirements of the apprenticeship. Prior learning will be assessed through transcripts, certifications, course credits, and/or demonstrated skills. Assigned mentors will assess apprentices for credit for prior learning at any time during the probationary period.

The following core and as-assigned course topics outlined below may be delivered by various educational institutions and training providers, as determined and approved by sponsor and employer.

**COURSE TOPICS**

The following are the core technical course topics for the apprenticeship.

|  |  |
| --- | --- |
| **CORE COURSE TOPICS** | **HOURS** |
| CompTIA IT Fundamentals (Course) | 9 |
| CompTIA IT Fundamentals+ (Virtual Lab) | 25.5 |
| CompTIA IT Fundamentals (Practice Test) | 1 |
| CompTIA A+ 220-1001 (Course) | 12.5 |
| Como TIA A+ Core 1 (Practice Test) | 1.5 |
| CompTIA - 220-1001 A+ (Practice Test) | 2 |
| CompTIA A+ 220-1002 (Course) | 26.5 |
| CompTIA A+ 220-1002 (Virtual Lab) | 25 |
| CompTIA A+ Core 2 (Practice Test) | 1.5 |
| CompTIA A+ 220-1002 (Practice Test) | 1.5 |
| Cisco Certified Network Associate (CCNA) Certification (Course) | 31 |
| CCNA ICND1 (Course) | 14 |
| Intermediate Printing Security (Course) | 3 |
| Microsoft Windows Operating System Fundamentals (Virtual Lab) | 16 |
| Microsoft Security Fundamentals (Virtual Lab) | 15 |
| Intermediate PC Security (Course) | 4 |
| Implementing a Desktop Infrastructure (Virtual Lab) | 16.5 |
| Axelos ITIL Foundations (Course) | 4 |
| ITIL Foundation (Practice Test) | 1 |
| Axelos: ITIL Foundation (Practice Test) | 1.5 |
| COBIT (Course) | 4.5 |
| Hyper-V (Course) for Windows 10 | 5.5 |
| Virtualization Management (Course) | 14.5 |
| Cloud Architecture Foundations (Course) | 7.5 |
| **Total Core Hours** | **244** |

The following are as-assigned course topics for the apprenticeship. An employer or program may require these additional course topics as part of a program-specific assignment. These as-assigned course topics may differ for the occupational variation in focus of the apprenticeship. The number of hours shows a range, adjustable based on the employer’s needs and areas of emphasis.

|  |  |
| --- | --- |
| **AS-ASSIGNED COURSE TOPICS** | **Hours** |
| Teamwork and Collaboration | 8 |
| Communication | 10 |
| Problem Solving | 5 |
| Critical Thinking | 3 |
| Conflict Management | 3 |
| Time Management | 5 |
| Customer Service | 3 |
| **Total Recommended Hours** | **37** |

The above related instruction (RI) outline is intended as a guide. The course topics need not be followed in any sequence, and it is understood that some adjustments in course topics/subtopics may be necessary to allow for different learning experiences. In all cases, the apprentice is to receive sufficient RI to allow them to obtain the knowledge necessary to perform the relevant competencies using good workmanship in all work processes which are a part of the industry. In addition, the apprentice shall be fully instructed in safety and OSHA requirements.