

**Florida Department of Education
CURRICULUM FRAMEWORK**

Program Title: Network Support Services
Program Type: Job Preparatory
Occupational Area: Business Technology Education
Components: Core and Five Occupational Completion Points

| | <u>Secondary</u> | <u>PSAV</u> |
|--|---|--|
| Program Number: | 8207000 | B070304 |
| CIP Number: | 0507.030400 | 0507.030400 |
| Grade Level: | 9-12, 30, 31 | 30, 31 |
| Standard Length: | 6 credits | 900 hours |
| Certification: | BUS ED @4 1 @2 VOE @7 TEACH CBE @7 TEC ELEC \$7 G BUS DP @7 G ELECT DP @7 G BOOKKEEPIN @4 7 G CLERICAL @7 G SECRETAR @7 G | BUS ED @4 1 @2 VOE @7 TEACH CBE @7 TEC ELEC \$7 G BUS DP @7 G ELECT DP @7 G BOOKKEEPIN @4 @7 G CLERICAL @7 G SECRETAR @7 G |
| [OCP C, D, and E Only] Additional certification accepted: | COMP SCI @6 @2 | COMP SCI @6 @2 |
| CTSO: | FBLA BPA | Phi Beta Lambda BPA |
| Coop Method: | Yes | Yes |
| Apprenticeship: | No | No |
| Facility Code: | 212 | 212 |
| Basic Skills: | | |
| Math | | 9 |
| Language | | 9 |
| Reading | | 9 |

- I. **PURPOSE:** This program is designed to prepare students for employment as a General Office Clerk I, General Office Clerk II, Network Support Help Desk, Network Support Specialist, and Network Administrator.

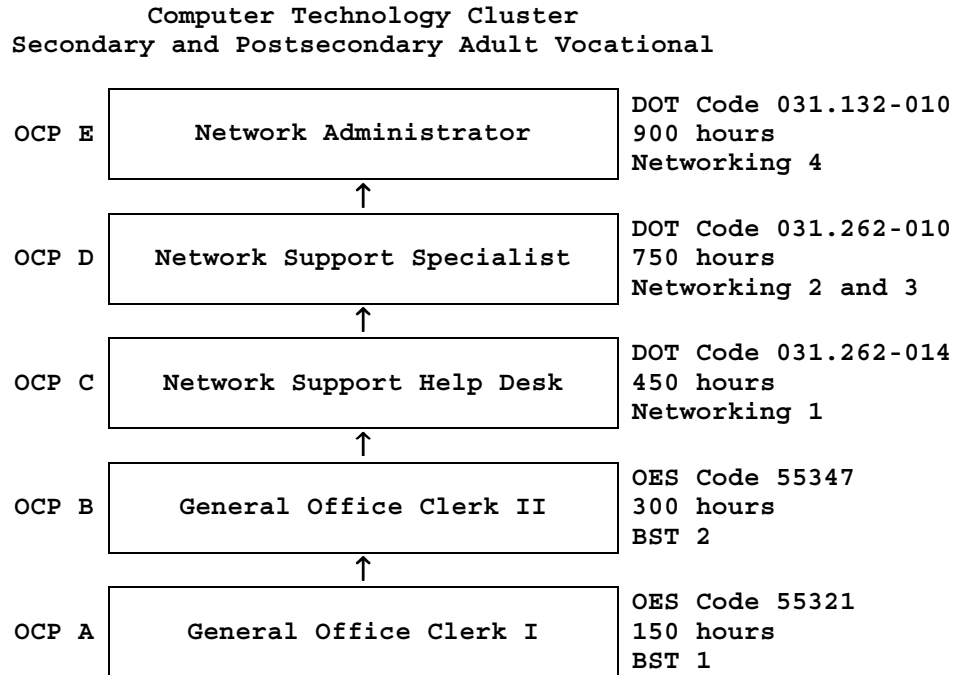
This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions. The content includes instruction in computer literacy; software application support; basic hardware configuration and troubleshooting; networking technologies, troubleshooting, security, and administration; and customer service and human relations skills.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the network support services industry: planning; management; finance; technical and production skills; underlying principles of technology; labor issues; community issues; and health, safety, and environmental issues.

- II. **PROGRAM STRUCTURE:** This program is a planned sequence of instruction consisting of the Business Technology Education Core (Business Systems and Technology 1 - OCP A and Business Systems and Technology 2 - OCP B) and three additional occupational completion points. Secondary or postsecondary students who have previously completed the Business Technology Education Core will not have to repeat the core. A student

who completes the applicable competencies at any occupational completion point may either continue with the training program or exit as an occupational completer.

The following diagram illustrates the Network Support Services program structure:



When offered at the secondary level, this program consists of the following courses which include the Business Technology Education Core:

- Business Technology Education Core
- 8209020 - Business Systems and Technology 1
- 8209030 - Business Systems and Technology 2

- 8207020 - Networking 1
- 8207030 - Networking 2
- 8207040 - Networking 3
- 8207050 - Networking 4

III. **LABORATORY ACTIVITIES:** Laboratory activities are an integral part of this program and include the use of keyboarding systems, computers, file servers, network transmission media, network cards, and other peripheral devices. Students will also work with operating systems, network operating systems, and applications software.

IV. **SPECIAL NOTES:** Future Business Leaders of America (Secondary), Phi Beta Lambda (Postsecondary), and Business Professionals of America are the appropriate Career and Technical Student Organizations (CTSO) for providing leadership training and for reinforcing specific career and technical skills. Career and Technical Student Organizations, when provided, shall be an integral part of the career and technical instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, FAC.

Cooperative training - OJT is appropriate for this program. Whenever cooperative training - OJT is offered, the following are required for

each student: a training plan, signed by the student, teacher, and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a workstation that reflects equipment, skills, and tasks that are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Rule 6A-10.040, FAC., the minimum basic skills grade levels required for postsecondary adult vocational students is: Mathematics 9.0, Language 9.0, Reading 9.0. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

When a secondary student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified on an individual basis. The job or jobs for which the student is being trained should be reflected in the student's desired postschool outcome statement on the Transition Individual Educational Plan. (Transition IEP).

The standard length of this program is 900 hours.

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this program.

- V. **INTENDED OUTCOMES:** After completing the following competencies, the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A

GENERAL OFFICE CLERK I - OES Code 55321

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. [Student Performance

- Standards: 01.01, 01.02, 01.03, 01.04, 01.05, 01.06, 01.07, 01.08.]
- 02.0 Use technology to enhance communications in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.01, 02.02, 02.03, 02.04, 02.05.]
 - 03.0 Use technology to apply and enhance communication skills in technical reading, writing. [Student Performance Standards: 03.01, 03.02, 03.03, 03.04, 03.05, 03.06.]
 - 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member. [Student Performance Standards: 04.01, 04.02, 04.03.]
 - 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 05.01, 05.02.]
 - 06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 06.01, 06.02, 06.03.]
 - 07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 07.01, 07.02, 07.03.]
 - 08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. [Student Performance Standards: 08.01, 08.02, 08.03.]
 - 09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. [Student Performance Standards: 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08.]
 - 10.0 Demonstrate personal and interpersonal skills appropriate for the workplace. [Student Performance Standards: 10.01, 10.02, 10.03.]
 - 11.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 11.01, 11.02.]

OCCUPATIONAL COMPLETION POINT - DATA CODE B

GENERAL OFFICE CLERK II- OES Code 55347

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 01.07, 01.08, 01.09, 01.10, 01.11, 01.12.]
- 02.0 Apply communication skills (reading, writing, speaking, listening, and viewing) in a courteous, concise, and correct manner on personal and professional levels. [Student Performance Standards: 02.07, 02.08, 02.09.]
- 03.0 Use technology to enhance the effectiveness of communications in order to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 03.03, 03.04, 03.05, 03.06, 03.08, 03.09, 03.10.]
- 04.0 Use information to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 04.03.]
- 05.0 Analyze current and emerging workplace trends and issues and determine potential impact on career and job objectives and workplace performance. [Student Performance Standards: 05.03, 05.04.]

- 06.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. [Student Performance Standards: 06.03, 06.04.]
- 07.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 07.03, 07.04.]
- 08.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 08.04, 08.05.]
- 09.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 09.05.]
- 10.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. [Student Performance Standards: 10.03, 10.04.]
- 11.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. [Student Performance Standards: 11.05, 11.06, 11.07.]
- 12.0 Demonstrate human relations/interpersonal skills appropriate for the workplace. [Student Performance Standards: 12.01, 12.02.]
- 13.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 13.01, 13.02, 13.03.]

OCCUPATIONAL COMPLETION POINT - DATA CODE C

NETWORK SUPPORT HELP DESK - DOT Code 031.262-014

Intended outcomes of OCP A and OCP B must be completed previously or concurrently. After completing the following additional competencies, the student will have achieved the occupational completion point of Network Support Help Desk and the student will be able to:

- 08.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standard: 08.18.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.29, 20.30, 20.31.]
- 37.0 Perform end user support and assistance by troubleshooting and diagnosing through telephone, e-mail, remote access, or direct contact. [Student Performance Standards: 37.01, 37.03, 37.05, 37.07, 37.09.]
- 38.0 Perform installation and configuration activities. [Student Performance Standards: 38.01, 38.02.]
- 39.0 Perform records management and maintenance activities. [Student Performance Standard: 39.01.]
- 40.0 Identify the purpose of and interrelationships among major hardware components. [Student Performance Standards: 40.01, 40.02, 40.03.]
- 42.0 Demonstrate proficiency using operating systems. [Student Performance Standards: 42.01, 42.02, 42.03, 42.04, 42.05, 42.06, 42.07.]
- 43.0 Demonstrate proficiency using Graphical User Interface (GUI) operating systems. [Student Performance Standards: 43.01, 43.02, 43.04, 43.05, 43.06, 43.07, 43.08, 43.10, 43.11, 43.12.]
- 44.0 Demonstrate proficiency using computer networks. [Student Performance Standards: 44.01, 44.02.]

46.0 Develop electronic communications skills. [Student Performance Standards: 46.01, 46.02.]

OCCUPATIONAL COMPLETION POINT - DATA CODE D

NETWORK SUPPORT SPECIALIST - DOT Code 031.262-010

Intended outcomes of OCP A, OCP B, and OCP C must be completed previously. After completing the following additional competencies, the student will have achieved the occupational completion point of Network Support Specialist and the student will be able to:

- 02.0 Apply communication skills (reading, writing, speaking, listening, and viewing) in a courteous, concise, and correct manner on personal and professional levels. [Student Performance Standard: 02.19.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.29, 20.30, 20.31.]
- 37.0 Perform end user support and assistance by troubleshooting and diagnosing through telephone, e-mail, remote access, or direct contact. [Student Performance Standards: 37.02, 37.04, 37.06, 37.08, 37.10, 37.11.]
- 39.0 Perform records management and maintenance activities. [Student Performance Standards: 39.02, 39.03.]
- 40.0 Identify the purpose of and interrelationships among major hardware components. [Student Performance Standards: 40.04, 40.05, 40.06.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.02, 41.03, 41.04, 41.05, 41.06.]
- 42.0 Demonstrate proficiency using operating systems. [Student Performance Standards: 42.08, 42.09.]
- 43.0 Demonstrate proficiency using Graphical User Interface (GUI) operating systems. [Student Performance Standards: 43.03, 43.09, 43.13.]
- 44.0 Demonstrate proficiency using computer networks. [Student Performance Standards: 44.03, 44.04, 44.06, 44.07, 44.08, 44.09, 44.10, 44.16, 44.16, 44.17, 44.18.]
- 45.0 Provide training to users. [Student Performance Standards: 45.01, 45.02.]
- 46.0 Develop electronic communications skills. [Student Performance Standards: 46.03, 46.05.]

OCCUPATIONAL COMPLETION POINT - DATA CODE E

NETWORK ADMINISTRATOR - DOT Code 031.132-010

Intended outcomes of OCP A, OCP B, OCP C, and OCP D must be completed previously. After completing the following additional competencies, the student will have achieved the occupational completion point of Network Administrator and the student will be able to:

- 08.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standard: 08.17.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.29, 20.30, 20.32.]
- 37.0 Perform end user support and assistance by troubleshooting and diagnosing through telephone, e-mail, remote access, or direct contact. [Student Performance Standard: 37.12.]
- 39.0 Perform records management and maintenance activities. [Student Performance Standard: 39.04.]

- 41.0 Perform e-mail activities. [Student Performance Standards: 41.07, 41.08.]
- 44.0 Demonstrate proficiency using computer networks. [Student Performance Standards: 44.04, 44.11, 44.12, 44.13, 44.14, 44.15.]
- 45.0 Provide training to users. [Student Performance Standards: 45.03, 45.04]
- 46.0 Develop electronic communications skills. [Student Performance Standard: 46.04.]

July 2001

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Network Support Services
Secondary Number: 8207000
Postsecondary Number: B070304

OCCUPATIONAL COMPLETION POINT - DATA CODE A
GENERAL OFFICE CLERK I - OES 55321

INFORMATION SYSTEMS

- 01.0 DEMONSTRATE KNOWLEDGE, SKILL, AND APPLICATION OF INFORMATION SYSTEMS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE. APPLY ERGONOMIC PRINCIPLES APPLICABLE TO THE CONFIGURATION OF COMPUTER WORKSTATIONS.-The student will be able to:
- 01.01 Develop keyboarding skills to enter and manipulate text and data. LA.B.1.4.3
 - 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks. LA.B.2.4.4
 - 01.03 Identify and describe communications and networking systems used in workplace environments.
 - 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software. LA.B.2.4.4, LA.A.2.4.6
 - 01.05 Demonstrate basic file management skills. LA.A.2.4.2, LA.B.2.4.4, LA.B.2.4.6
 - 01.06 Troubleshoot problems with computer software, hardware, peripherals, and other office equipment. LA.D.2.4.4
 - 01.07 Describe ethical issues and problems associated with computers and information systems.
 - 01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

WORKPLACE COMMUNICATIONS

- 02.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING, SPEAKING, LISTENING, AND VIEWING-The student will be able to:
- 02.01 Select and use appropriate modes of communication for specific job and work situations. LA.B.2.4.4
 - 02.02 Organize ideas and communicate oral and written messages appropriate to listeners and situations in workplace and business environments. LA.B.2.4.2
 - 02.03 Use listening, speaking, and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers. LA.C.1.4.1, LA.C.3.4.1, HE.B.3.4.1
 - 02.04 Select and use standard written business communication formats. LA.B.1.4.1, LA.B.1.4.3
 - 02.05 Use professional business vocabulary appropriate for entry-level jobs in business environments. LA.A.1.4.3
- 03.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING -The student will be able to:

- 03.01 Select and use word processing software and accompanying features to enhance written business communications. LA.B.1.4.1
- 03.02 Use the writing process to create/edit business documents appropriate to the subject matter, purpose, and audience. LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3
- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communications. LA.B.2.4.1, LA.B.2.4.2
- 03.04 Explore and demonstrate effective and efficient use of telecommunications systems including telephone techniques for handling incoming and placing outgoing business calls. LA.B.1.4.3
- 03.05 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
- 03.06 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

MANAGEMENT

04.0 DEVELOP AN AWARENESS OF MANAGEMENT FUNCTIONS AND ORGANIZATIONAL STRUCTURES AS THEY RELATE TO TODAY'S WORKPLACE AND EMPLOYER/EMPLOYEE ROLES. DEMONSTRATE INITIATIVE, COURTESY, LOYALTY, HONESTY, COOPERATION AND PUNCTUALITY AS A TEAM MEMBER—The student will be able to:

- 04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
- 04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
- 04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

CURRENT TRENDS/ISSUES IN THE WORKPLACE

05.0 PRACTICE QUALITY PERFORMANCE IN THE LEARNING ENVIRONMENT AND THE WORKPLACE—The student will be able to:

- 05.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).
- 05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

MANAGEMENT

06.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
- 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.

06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

COMPUTATION AND FINANCE

07.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE AND TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 07.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures. MA.E.1.4.1, MA.E.A.4.2
- 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time). MA.B.3.4.1
- 07.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate. MA.A.3.4.3

JOB READINESS AND CAREER DEVELOPMENT

08.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE GOALS—The student will be able to:

- 08.01 Assess, analyze and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
- 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
- 08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS. EXPERIENCE WORK-BASED LEARNING THROUGH JOB SHADOWING, MENTORING, E-COACHING, ETC.—The student will be able to:

- 09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
- 09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
- 09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow up). LA.C.3.4.4
- 09.04 Design, initiate, refine, and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
- 09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
- 09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
- 09.08 Experience work-based learning through volunteerism, job shadowing, mentoring, e-coaching, etc.

HUMAN RELATIONS/INTERPERSONAL SKILLS

- 10.0 DEMONSTRATE PERSONAL AND INTERPERSONAL SKILLS APPROPRIATE FOR THE WORKPLACE—The student will be able to:
- 10.01 Accept constructive criticism. SS.B.1.4.5
 - 10.02 Apply appropriate strategies to manage and resolve conflict in work situations. LA.D.1.4.2, SS.B.1.4.5, HE.B.3.4.5
 - 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

ADMINISTRATIVE OFFICE PROCEDURES

- 11.0 PERFORM OFFICE FUNCTIONS AND RESPONSIBILITIES TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 11.01 Perform business tasks (e.g., filing and records management, scheduling, reprographics, mail handling, etc.). LA.A.2.4.4, LA.A.2.4.7, LA.A.2.4.8, LA.B.2.4.2
 - 11.02 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

OCCUPATIONAL COMPLETION POINT - DATA CODE B GENERAL OFFICE CLERK II - OES 55347

Intended outcomes of OCP A must be completed previously or concurrently.

INFORMATION SYSTEMS

- 01.0 DEMONSTRATE KNOWLEDGE, SKILL, AND APPLICATION OF INFORMATION SYSTEMS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 01.07 Enhance proficiency with touch keyboarding skills (speed and accuracy) to enter and manipulate data. LA.B.1.4.3
 - 01.08 Use current and emerging computer technology and software to perform personal and business-related tasks, solve problems, and organize and communicate information. LA.B.2.4.4
 - 01.09 Troubleshoot problems with computer hardware, peripherals, and other office equipment.
 - 01.10 Use communications and networking systems to perform tasks and solve problems in business environments. LA.D.2.4.4
 - 01.11 Describe ergonomic principles important to the configuration of computer workstations. HE.B.2.4.1
 - 01.12 Describe ethical issues and problems associated with computers and information systems. LA.D.2.4.6

WORKPLACE COMMUNICATIONS

- 02.0 APPLY COMMUNICATION SKILLS (READING, WRITING, SPEAKING, LISTENING, AND VIEWING) IN A COURTEOUS, CONCISE, AND CORRECT MANNER ON PERSONAL AND PROFESSIONAL LEVELS—The student will be able to:
- 02.07 Select and use modes of communications appropriate to specific job

- and workplace situations. LA.B.2.4.4, LA.C.3.4.2, LA.C.1.4.3
- 02.08 Select and use standard written communication formats used for professional and business communication. LA.B.1.4.2, LA.B.1.4.3
- 02.09 Use professional business vocabulary appropriate for internal and external communications in business environments. LA.B.2.4.2
- 03.0 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATIONS IN ORDER TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 03.03 Use the writing process to create business-related documents appropriate to the subject matter, purpose, and audience.
- 03.04 Revise and edit business-related documents to ensure correct grammar, spelling, punctuation, and format.
- 03.05 Use database, spreadsheet, and integrated software packages to enhance written business communications.
- 03.06 Use presentation software to enhance personal and professional communications.
- 03.08 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication. LA.B.2.4.2, LA.B.2.4.4
- 03.09 Explore current and emerging telecommunication systems. LA.B.2.4.4
- 03.10 Discuss communication systems—cultural, organizational, technological, and interpersonal. LA.D.1.4.2
- 04.0 USE INFORMATION TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 04.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail) to solve business problems and complete business tasks. LA.B.2.4.1, LA.A.2.4.8

CURRENT TRENDS/ISSUES IN THE WORKPLACE

- 05.0 ANALYZE CURRENT AND EMERGING WORKPLACE TRENDS AND ISSUES AND DETERMINE POTENTIAL IMPACT ON CAREER AND JOB OBJECTIVES AND WORKPLACE PERFORMANCE—The student will be able to:
- 05.03 Identify, define, and discuss current trends and issues that impact global and local business/workplace environments. SS.D.2.4.6, LA.D.2.4.1
- 05.04 Communicate (individually and in groups) current and emerging business trends and recommend strategies for controlling the impact of these trends on personal and professional levels.

MANAGEMENT

- 06.0 DEVELOP AN AWARENESS OF MANAGEMENT FUNCTIONS AND ORGANIZATIONAL STRUCTURES AS THEY RELATE TO TODAY'S WORKPLACE AND EMPLOYER/EMPLOYEE ROLES—The student will be able to:
- 06.03 Design, implement, and evaluate organizational structures for managing project teams.
- 06.04 Demonstrate an awareness of the employee's role in maintaining productive business environments in today's workplace.
- 07.0 PRACTICE QUALITY PERFORMANCE IN THE LEARNING ENVIRONMENT AND THE WORKPLACE—The student will be able to:
- 07.03 Routinely assess personal performance and identify and implement strategies for improvement.
- 07.04 Assess peers and/or group members' performance in order to develop

and implement strategies for improvement.

08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

08.04 Develop and implement a plan for maintaining quality service and production in a workplace, business, or learning environment.

08.05 Facilitate focus group discussions regarding service, supervision, and ethical considerations that impact the workplace, business, or learning environment.

COMPUTATION AND FINANCE

09.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

09.05 Use common standards of measurement in solving work-related or business problems (e.g., length, weight, currency, time).

MA.A.3.4.3

JOB READINESS AND CAREER DEVELOPMENT

10.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE GOALS—The student will be able to:

10.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

10.04 Reassess and analyze individual talents, interests, and personal characteristics and relate to desired career options.

11.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS--The student will be able to:

11.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.

11.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments. LA.C.3.4.4

11.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.

HUMAN RELATIONS/INTERPERSONAL SKILLS

12.0 DEMONSTRATE HUMAN RELATIONS/INTERPERSONAL SKILLS APPROPRIATE FOR THE WORKPLACE—The student will be able to:

12.01 Accept constructive criticism. SS.B.1.4.5

12.02 Apply appropriate strategies to manage conflict in work situations. LA.D.1.4.2, SS.B.1.4.5, HE.B.3.4.5

ADMINISTRATIVE OFFICE PROCEDURES

13.0 PERFORM OFFICE FUNCTIONS AND RESPONSIBILITIES TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 13.01 Perform office tasks (e.g., filing and records management, scheduling, reprographics, and mail handling). LA.A.2.4.4, LA.A.2.4.6, LA.A.2.4.7, LA.A.2.4.8, LA.B.2.4.2, LA.C.3.4.2
- 13.02 Demonstrate effective telephone techniques and procedures for handling incoming calls and placing outgoing calls.
- 13.03 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, etc.).

OCCUPATIONAL COMPLETION POINT - DATA CODE C

NETWORK SUPPORT HELP DESK - DOT 031.262-014

Intended outcomes of OCP A and OCP B must be completed previously or concurrently.

MANAGEMENT

08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 08.18 Develop diplomatic methods to communicate with customers.

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

- 20.29 Participate in work-based learning experiences in a network support services environment.
- 20.30 Discuss the use of technology in a network support services environment.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

- 37.01 Identify configuration problems.
- 37.03 Identify software problems.
- 37.05 Identify hardware malfunctions.
- 37.07 Identify network malfunctions.
- 37.09 Apply first response assistance for minor repair work.

38.0 PERFORM INSTALLATION AND CONFIGURATION ACTIVITIES—The student will be able to:

- 38.01 Perform system hardware setup and operating system software installation.
- 38.02 Perform installation and configuration of applications software, hardware, and device drivers.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

39.01 Develop standard inventory and maintenance procedures for media/technology resources.

40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:

- 40.01 Identify and describe the functions of main processing boards (e.g., CPUs, RAM, ROM, bus architecture).
- 40.02 Identify and describe the functions of communication ports (e.g., serial and parallel ports).
- 40.03 Identify and describe the functions of peripheral devices (e.g., scanners, modems, hard drives, printers).

42.0 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—The student will be able to:

- 42.01 Identify operating system file naming conventions.
- 42.02 Identify data measurement (e.g., bits, bytes, kilobytes).
- 42.03 Identify the operating system command language syntax and menu structure.
- 42.04 Apply commands to perform common operating system functions.
- 42.05 Design and implement directory tree structures.
- 42.06 Demonstrate the use of wildcard characters or operating system file selection filtering techniques.
- 42.07 Perform storage formatting and preparation activities.

43.0 DEMONSTRATE PROFICIENCY USING GRAPHICAL USER INTERFACE (GUI) OPERATING SYSTEMS—The student will be able to:

- 43.01 Identify parts of GUI windows.
- 43.02 Create and use icons.
- 43.04 Demonstrate proficiency in using menu systems.
- 43.05 Demonstrate proficiency in using pointing and selection devices.
- 43.06 Identify keyboard shortcuts and special function keys.
- 43.07 Demonstrate proficiency in manipulating windows.
- 43.08 Utilize help systems and hypertext links.
- 43.10 Create, organize, and maintain file system directories.
- 43.11 Organize desktop objects.
- 43.12 Run multiple applications.

44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:

- 44.01 Define networking and describe the purpose of a network.
- 44.02 Identify the purposes and interrelationships among the major components of networks (e.g., servers, clients, transmission media, network operating system, network boards).

46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:

- 46.01 Explain the operation of the Internet, its importance today, and its brief history.
- 46.02 Identify Internet terminology.

OCCUPATIONAL COMPLETION POINT - DATA CODE D

NETWORK SUPPORT SPECIALIST - DOT 031.262-010

Intended outcomes of OCP A, OCP B, and OCP C must be completed previously.

WORKPLACE COMMUNICATIONS

02.0 APPLY COMMUNICATION SKILLS (READING, WRITING, SPEAKING, LISTENING, AND VIEWING) IN A COURTEOUS, CONCISE, AND CORRECT MANNER ON PERSONAL AND PROFESSIONAL LEVELS—The student will be able to:

02.19 Communicate technical information in a concise, understandable manner to a non-technical audience both verbally and in writing.

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

20.29 Participate in work-based learning experiences in a network support services environment.

20.30 Discuss the use of technology in a network support services environment.

20.31 Compare and contrast the software applications used in a network support services environment.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

37.02 Apply troubleshooting and diagnostic techniques to configuration problems.

37.04 Apply troubleshooting and diagnostic techniques to software problems.

37.06 Apply troubleshooting and diagnostic techniques to hardware malfunctions.

37.08 Apply troubleshooting and diagnostic techniques to network malfunctions.

37.10 Apply on-site response assistance for minor repair work.

37.11 Develop procedures for remote access response to user requests for assistance.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

39.02 Develop procedures to initiate vendor service for hardware or software support.

39.03 Apply procedures to initiate vendor service for hardware or software support.

40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:

40.04 Identify and describe the functions of network interface cards.

40.05 Identify and describe other network hardware (e.g., cables, routers, hubs).

40.06 Demonstrate proficiency in the assembly and connection of network transmission media.

41.0 PERFORM E-MAIL ACTIVITIES—The student will be able to:

41.01 Describe e-mail capabilities and functions.

41.02 Create and send e-mail messages with attachments.

41.03 Reply to and forward e-mail messages.

41.04 Organize and manage e-mail messages.

- 41.05 Utilize all applicable e-mail options and functions.
- 41.06 Install and configure e-mail client software.
- 42.0 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—The student will be able to:
 - 42.08 Identify and configure essential operating system configuration files.
 - 42.09 Demonstrate the use of operating system management utilities.
- 43.0 DEMONSTRATE PROFICIENCY USING GRAPHICAL USER INTERFACE (GUI) OPERATING SYSTEMS—The student will be able to:
 - 43.03 Demonstrate proficiency in using GUI operating system management utilities.
 - 43.09 Demonstrate the use of file management utilities.
 - 43.13 Identify and configure essential GUI operating system configuration files.
- 44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:
 - 44.03 Describe the various types of network topologies.
 - 44.04 Identify and describe the purpose of standards, protocols, and the Open Systems Interconnection (OSI) reference model.
 - 44.06 Discuss the responsibilities of the network administrator (e.g., rights and responsibilities).
 - 44.07 Develop user logon procedures.
 - 44.08 Implement and manage printing on a network.
 - 44.09 Utilize network management infrastructures (e.g., network monitoring, alerting, security) to perform administrative tasks.
 - 44.10 Identify common backup strategies and procedures.
 - 44.16 Identify and describe the basic components and operation of network printing.
- 45.0 PROVIDE TRAINING TO USERS—The student will be able to:
 - 45.01 Develop methods for training on applicable client network login and logout procedures.
 - 45.02 Develop methods for training users to use network printing.
- 46.0 DEVELOP ELECTRONIC COMMUNICATION SKILLS—The student will be able to:
 - 46.03 Exhibit proficiency in using Internet services.
 - 46.05 Exhibit proficiency in downloading Internet information.

OCCUPATIONAL COMPLETION POINT - DATA CODE E
NETWORK ADMINISTRATOR - DOT 031.132-010

Intended outcomes of OCP A, OCP B, OCP C, and OCP D must be completed previously.

MANAGEMENT

- 08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
 - 08.17 Develop strategies for resolving customer conflicts.

WORK-BASED LEARNING

- 20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:
- 20.29 Participate in work-based learning experiences in a network support services environment.
 - 20.30 Discuss the use of technology in a network support services environment.
 - 20.32 Discuss the management/supervisors skills needed in a network support services environment.

NETWORK/SOFTWARE SUPPORT

- 37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:
- 37.12 Apply procedures for remote access response to user requests for assistance.
- 39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:
- 39.04 Design, create, and maintain a database of all service incidents.
- 41.0 PERFORM E-MAIL ACTIVITIES—The student will be able to:
- 41.07 Identify and describe different e-mail server packages.
 - 41.08 Demonstrate proficiency in the installation, configuration, and management of e-mail server software.
- 44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:
- 44.05 Perform installation of network server operating system and client software.
 - 44.11 Apply common backup strategies and procedures.
 - 44.12 Perform network documentation activities.
 - 44.13 Identify network troubleshooting methods.
 - 44.14 Install and configure software applications on the file server for user access.
 - 44.15 Implement and manage network security.
 - 44.16 Understand and manage network bandwidths (e.g., pushing files across the network).
 - 44.17 Perform network administrative tasks using network management products.
 - 44.18 Identify and differentiate tiers in a network management infrastructure (e.g., web-based browsers, point products, enterprise/computer associates).
- 45.0 PROVIDE TRAINING TO USERS—The student will be able to:
- 45.03 Develop methods for training users to access network information and resources.
 - 45.04 Develop methods for training users to use e-mail.
- 46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:
- 46.04 Exhibit proficiency in publishing Internet and Intranet documents.

July 2001

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8209020
Course Title: Business Systems and Technology 1
(Business Systems and Technology)
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basic skills and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications, so that they may be used as communication tools for enhancing personal and workplace proficiency in an information based society. After successful completion of this core course, students will have met Occupational Completion Point - Data Code A, General Office Clerk - OES 55321.

INFORMATION SYSTEMS

01.0 DEMONSTRATE KNOWLEDGE, SKILL, AND APPLICATION OF INFORMATION SYSTEMS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE. APPLY ERGONOMIC PRINCIPLES APPLICABLE TO THE CONFIGURATION OF COMPUTER WORKSTATIONS.-The student will be able to:

- 01.01 Develop keyboarding skills to enter and manipulate text and data. LA.B.1.4.3
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks. LA.B.2.4.4
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software. LA.B.2.4.4, LA.A.2.4.6
- 01.05 Demonstrate basic file management skills. LA.A.2.4.2, LA.B.2.4.4, LA.B.2.4.6
- 01.06 Troubleshoot problems with computer software, hardware, peripherals, and other office equipment. LA.D.2.4.4
- 01.07 Describe ethical issues and problems associated with computers and information systems.
- 01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

WORKPLACE COMMUNICATIONS

02.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING, SPEAKING, LISTENING, AND VIEWING-The student will be able to:

- 02.01 Select and use appropriate modes of communication for specific job and work situations. LA.B.2.4.4
- 02.02 Organize ideas and communicate oral and written messages appropriate to listeners and situations in workplace and business environments. LA.B.2.4.2

- 02.03 Use listening, speaking, and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers. LA.C.1.4.1, LA.C.3.4.1, HE.B.3.4.1
 - 02.04 Select and use standard written business communication formats. LA.B.1.4.1, LA.B.1.4.3
 - 02.05 Use professional business vocabulary appropriate for entry-level jobs in business environments. LA.A.1.4.3
- 03.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING –The student will be able to:
- 03.01 Select and use word processing software and accompanying features to enhance written business communications. LA.B.1.4.1
 - 03.02 Use the writing process to create/edit business documents appropriate to the subject matter, purpose, and audience. LA.B.1.4.1, LA.B.1.4.2, LA.B.1.4.3
 - 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communications. LA.B.2.4.1, LA.B.2.4.2
 - 03.04 Explore and demonstrate effective and efficient use of telecommunications systems including telephone techniques for handling incoming and placing outgoing business calls. LA.B.1.4.3
 - 03.05 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
 - 03.06 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

MANAGEMENT

- 04.0 DEVELOP AN AWARENESS OF MANAGEMENT FUNCTIONS AND ORGANIZATIONAL STRUCTURES AS THEY RELATE TO TODAY'S WORKPLACE AND EMPLOYER/EMPLOYEE ROLES. DEMONSTRATE INITIATIVE, COURTESY, LOYALTY, HONESTY, COOPERATION AND PUNCTUALITY AS A TEAM MEMBER–The student will be able to:
- 04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
 - 04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
 - 04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

CURRENT TRENDS/ISSUES IN THE WORKPLACE

- 05.0 PRACTICE QUALITY PERFORMANCE IN THE LEARNING ENVIRONMENT AND THE WORKPLACE–The student will be able to:
- 05.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).
 - 05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

MANAGEMENT

06.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
- 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
- 06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

COMPUTATION AND FINANCE

07.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE AND TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 07.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures. MA.E.1.4.1, MA.E.A.4.2
- 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time). MA.B.3.4.1
- 07.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate. MA.A.3.4.3

JOB READINESS AND CAREER DEVELOPMENT

08.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE GOALS—The student will be able to:

- 08.01 Assess, analyze and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
- 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
- 08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

10.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS. EXPERIENCE WORK-BASED LEARNING THROUGH JOB SHADOWING, MENTORING, E-COACHING, ETC. —The student will be able to:

- 09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
- 09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
- 09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow up). LA.C.3.4.4

- 09.04 Design, initiate, refine, and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
- 09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
 - 09.09 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
 - 09.10 Experience work-based learning through volunteerism, job shadowing, mentoring, e-coaching, etc.

HUMAN RELATIONS/INTERPERSONAL SKILLS

- 10.0 DEMONSTRATE PERSONAL AND INTERPERSONAL SKILLS APPROPRIATE FOR THE WORKPLACE—The student will be able to:
 - 10.01 Accept constructive criticism. SS.B.1.4.5
 - 10.02 Apply appropriate strategies to manage and resolve conflict in work situations. LA.D.1.4.2, SS.B.1.4.5, HE.B.3.4.5
 - 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

ADMINISTRATIVE OFFICE PROCEDURES

- 11.0 PERFORM OFFICE FUNCTIONS AND RESPONSIBILITIES TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
 - 11.01 Perform business tasks (e.g., filing and records management, scheduling, reprographics, mail handling, etc.). LA.A.2.4.4, LA.A.2.4.7, LA.A.2.4.8, LA.B.2.4.2
 - 11.02 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

July 2001

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Secondary Course Number: 8209030
Course Title: Business Systems and Technology 2
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to build upon the experiences and content of Business Systems and Technology 1 so that a fundamental core of knowledge, skills, and attitudes required for today's business environment is established. Emphasis is placed on developing proficiency with database, spreadsheet, presentation,

and integrated software applications as tools for accomplishing business related job objectives and enhancing workplace performance. After successful completion of the Business Technology Education Core courses (Business Systems and Technology 1 and 2), students will have met Occupational Completion Point - Data Code B, General Office Clerk II - OES 55347.

INFORMATION SYSTEMS

01.00 DEMONSTRATE KNOWLEDGE, SKILL, AND APPLICATION OF INFORMATION SYSTEMS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 01.07 Enhance proficiency with touch keyboarding skills (speed and accuracy) to enter and manipulate data. LA.B.1.4.3
- 01.08 Use current and emerging computer technology and software to perform personal and business related tasks, solve problems, and organize and communicate information. LA.B.2.4.4
- 01.09 Troubleshoot problems with computer hardware, peripherals, and other office equipment. LA.D.2.4.4
- 01.10 Use communications and networking systems to perform tasks and solve problems in business environments.
- 01.11 Describe ergonomic principles important to the configuration of computer workstations. HE.B.2.4.1
- 01.12 Describe ethical issues and problems associated with computers and information systems. LA.D.2.4.6

WORKPLACE COMMUNICATIONS

02.00 APPLY COMMUNICATION SKILLS (READING, WRITING, SPEAKING, LISTENING, AND VIEWING) IN A COURTEOUS, CONCISE, AND CORRECT MANNER ON PERSONAL AND PROFESSIONAL LEVELS—The student will be able to:

- 02.07 Select and use modes of communications appropriate to specific job and workplace situations. LA.B.2.4.4, LA.C.3.4.2, LA.C.1.4.3
- 02.08 Select and use standard written communication formats used for professional and business communication. LA.B.1.4.2, LA.B.1.4.3
- 02.09 Use professional business vocabulary appropriate for internal and external communications in business environments. LA.B.2.4.2

03.00 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATIONS IN ORDER TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 03.03 Use the writing process to create business-related documents appropriate to the subject matter, purpose, and audience.
- 03.04 Revise and edit business-related documents to ensure correct grammar, spelling, punctuation, and format.
- 03.05 Use database, spreadsheet, and integrated software packages to enhance written business communications.
- 03.06 Use presentation software to enhance personal and professional communications.
- 03.08 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication. LA.B.2.4.2, LA.B.2.4.4
- 03.09 Explore current and emerging telecommunication systems. LA.B.2.4.4
- 03.10 Discuss communication systems—cultural, organizational, technological, and interpersonal. LA.D.1.4.2

04.00 USE INFORMATION TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

- 04.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail) to solve business problems and complete business tasks. LA.B.2.4.1, LA.A.2.4.8

CURRENT TRENDS/ISSUES IN THE WORKPLACE

- 05.0 ANALYZE CURRENT AND EMERGING WORKPLACE TRENDS AND ISSUES AND DETERMINE POTENTIAL IMPACT ON CAREER AND JOB OBJECTIVES AND WORKPLACE PERFORMANCE—The student will be able to:
- 05.03 Identify, define, and discuss current trends and issues that impact global and local business/workplace environments. SS.D.2.4.6, LA.D.2.4.1
- 05.04 Communicate (individually and in groups) current and emerging business trends and recommend strategies for controlling the impact of these trends on personal and professional levels.

MANAGEMENT

- 06.0 DEVELOP AN AWARENESS OF MANAGEMENT FUNCTIONS AND ORGANIZATIONAL STRUCTURES AS THEY RELATE TO TODAY'S WORKPLACE AND EMPLOYER/EMPLOYEE ROLES—The student will be able to:
- 06.03 Design, implement, and evaluate organizational structures for managing project teams.
- 06.04 Demonstrate an awareness of the employee's role in maintaining productive business environments in today's workplace.
- 07.0 PRACTICE QUALITY PERFORMANCE IN THE LEARNING ENVIRONMENT AND THE WORKPLACE—The student will be able to:
- 07.03 Routinely assess personal performance and identify and implement strategies for improvement.
- 07.04 Assess peers and/or group members' performance in order to develop and implement strategies for improvement.
- 08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 08.04 Develop and implement a plan for maintaining quality service and production in a workplace, business, or learning environment.
- 08.05 Facilitate focus group discussions regarding service, supervision, and ethical considerations that impact the workplace, business, or learning environment.

COMPUTATION AND FINANCE

- 09.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
- 09.05 Select and use the correct mathematical process to solve complex problem situations that are typical of business settings and use formulas when appropriate. MA.A.3.4.3

JOB READINESS AND CAREER DEVELOPMENT

10.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE GOALS—The student will be able to:

10.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

10.04 Reassess and analyze individual talents, interests, and personal characteristics and relate to desired career options.

11.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS--The student will be able to:

11.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.

11.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments. LA.C.3.4.4

11.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.

HUMAN RELATIONS/INTERPERSONAL SKILLS

12.0 DEMONSTRATE HUMAN RELATIONS/INTERPERSONAL SKILLS APPROPRIATE FOR THE WORKPLACE—The student will be able to:

12.01 Accept constructive criticism. SS.B.1.4.5

12.02 Apply appropriate strategies to manage conflict in work situations. LA.D.1.4.2, SS.B.1.4.5, HE.B.3.4.5

ADMINISTRATIVE OFFICE PROCEDURES

13.0 PERFORM OFFICE FUNCTIONS AND RESPONSIBILITIES TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

13.01 Perform office tasks (e.g., filing and records management, scheduling, reprographics, and mail handling). LA.A.2.4.4, LA.A.2.4.6, LA.A.2.4.7, LA.A.2.4.8, LA.D.2.4.2, LA.C.3.4.2

13.02 Demonstrate effective telephone techniques and procedures for handling incoming calls and placing outgoing calls.

13.03 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, etc.).

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Secondary Course Number: 8207020
Course Title: Networking 1
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop competencies needed for employment in network support positions. The content includes instruction in computer literacy, basic hardware configuration, hardware and software troubleshooting, operating systems, and computer networking. After successful completion of this course, students will have met Occupational Completion Point - Data Code C, Network Support Help Desk - DOT Code 031.262-014.

MANAGEMENT

08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

08.18 Develop diplomatic methods to communicate with customers.
 LA.C.1.4, LA.C.2.4, LA.D.1.4, FL.A.3.4, LA.D.2.4,

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

20.29 Participate in work-based learning experiences in a network support services environment. LA.C.3.4
 20.30 Discuss the use of technology in a network support services environment. LA.C.3.4.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

37.01 Identify configuration problems.
 37.03 Identify software problems.
 37.05 Identify hardware malfunctions.
 37.07 Identify network malfunctions.
 37.09 Apply first response assistance for minor repair work.

38.0 PERFORM INSTALLATION AND CONFIGURATION ACTIVITIES—The student will be able to:

38.01 Perform system hardware setup and operating system software installation.
 38.02 Perform installation and configuration of applications software, hardware, and device drivers.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

- 39.01 Develop standard inventory and maintenance procedures for media/technology resources.
- 40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:
- 40.01 Identify and describe the functions of main processing boards (e.g., CPUs, RAM, ROM, bus architecture).
 - 40.02 Identify and describe the functions of communication ports (e.g., serial and parallel ports).
 - 40.03 Identify and describe the functions of peripheral devices (e.g., scanners, modems, hard drives, printers).
- 42.0 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—The student will be able to:
- 42.01 Identify operating system file naming conventions.
 - 42.02 Identify data measurement (e.g., bits, bytes, kilobytes).
 - 42.03 Identify the operating system command language syntax and menu structure.
 - 42.04 Apply commands to perform common operating system functions.
 - 42.05 Design and implement directory tree structures.
 - 42.06 Demonstrate the use of wildcard characters or operating system file selection filtering techniques.
 - 42.07 Perform storage formatting and preparation activities.
- 43.0 DEMONSTRATE PROFICIENCY USING GRAPHICAL USER INTERFACE (GUI) OPERATING SYSTEMS—The student will be able to:
- 43.01 Identify parts of GUI windows.
 - 43.02 Create and use icons.
 - 43.04 Demonstrate proficiency in using menu systems.
 - 43.05 Demonstrate proficiency in using pointing and selection devices.
 - 43.06 Identify keyboard shortcuts and special function keys.
 - 43.07 Demonstrate proficiency in manipulating windows.
 - 43.08 Utilize help systems and hypertext links.
 - 43.10 Create, organize, and maintain file system directories.
 - 43.11 Organize desktop objects.
 - 43.12 Run multiple applications.
- 44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:
- 44.01 Define networking and describe the purpose of a network.
 - 44.02 Identify the purposes and interrelationships between the major components of networks (e.g., servers, clients, transmission media, network operating system, network boards).
- 46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:
- 46.01 Explain the operation of the Internet, its importance today, and its brief history.
 - 46.02 Identify Internet terminology.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207030
Course Title: Networking 2
Course Credit: 1

COURSE DESCRIPTION:

This course continues the study of network support services. The content includes troubleshooting and diagnostic techniques; network hardware devices, topographies, and standards; and e-mail and Internet activities. After successful completion of Networking 2 and 3, students will have met Occupational Completion Point - Data Code D, Network Support Specialist - DOT Code 031.262-010.

WORKPLACE COMMUNICATIONS

02.0 APPLY COMMUNICATION SKILLS (READING, WRITING, SPEAKING, LISTENING, AND VIEWING) IN A COURTEOUS, CONCISE, AND CORRECT MANNER ON PERSONAL AND PROFESSIONAL LEVELS—The student will be able to:

02.19 Communicate technical information in a concise, understandable manner to a non-technical audience both verbally and in writing.

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

20.29 Participate in work-based learning experiences in a network support services environment.

20.30 Discuss the use of technology in a network support services environment.

20.31 Compare and contrast the software applications used in a network support services environment.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

37.02 Apply troubleshooting and diagnostic techniques to configuration problems.

37.04 Apply troubleshooting and diagnostic techniques to software problems.

37.06 Apply troubleshooting and diagnostic techniques to hardware malfunctions.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

39.02 Develop procedures to initiate vendor service for hardware or software support.

40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:

- 40.04 Identify and describe the functions of network interface cards.
- 40.05 Identify and describe other network hardware (e.g., cables, routers, hubs).
- 41.0 PERFORM E-MAIL ACTIVITIES—The student will be able to:
 - 41.01 Describe e-mail capabilities and functions.
 - 41.02 Create and send e-mail messages with attachments.
 - 41.03 Reply to and forward e-mail messages.
 - 41.04 Organize and manage e-mail messages.
- 42.0 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—The student will be able to:
 - 42.08 Identify and configure essential operating system configuration files.
 - 42.09 Demonstrate the use of operating system management utilities.
- 43.0 DEMONSTRATE PROFICIENCY USING GRAPHICAL USER INTERFACE (GUI) OPERATING SYSTEMS—The student will be able to:
 - 43.03 Demonstrate proficiency in using GUI operating system management utilities.
 - 43.09 Demonstrate the use of file management utilities.
 - 43.13 Identify and configure essential GUI operating system configuration files
- 44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:
 - 44.03 Describe the various types of network topologies.
 - 44.04 Identify and describe the purpose of standards, protocols, and the Open Systems Interconnection (OSI) reference model.
 - 44.16 Identify and describe the basic components and operation of network printing.
- 45.0 PROVIDE TRAINING TO USERS—The student will be able to:
 - 45.01 Develop methods for training on applicable client network login and logout procedures.
 - 45.02 Develop methods for training users to use network printing.
- 46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:
 - 46.03 Exhibit proficiency in using Internet services.
 - 46.05 Exhibit proficiency in downloading Internet information.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207040
Course Title: Networking 3
Course Credit: 1

COURSE DESCRIPTION:

This course continues the study of network support services. The content includes on-site and remote end user support and assistance; network transmission media; e-mail options and functions; and network administration tasks. After successful completion of Networking 2 and 3, students will have met Occupational Completion Point - Data Code D, Network Support Specialist - DOT Code 031.262-010.

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

- 20.29 Participate in work-based learning experiences in a network support services environment.
- 20.30 Discuss the use of technology in a network support services environment.
- 20.31 Compare and contrast the software applications used in a network support services environment.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

- 37.08 Apply troubleshooting and diagnostic techniques to network malfunctions.
- 37.10 Apply on-site response assistance for minor repair work.
- 37.11 Develop procedures for remote access response to user requests for assistance.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

- 39.03 Apply procedures to initiate vendor service for hardware or software support.

40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:

- 40.06 Demonstrate proficiency in the assembly and connection of network transmission media.

41.0 PERFORM E-MAIL ACTIVITIES—The student will be able to:

- 41.05 Utilize all applicable e-mail options and functions.
- 41.06 Install and configure e-mail client software.

44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:

- 44.06 Discuss the responsibilities of the network administrator (e.g., rights and responsibilities).
- 44.07 Develop user logon procedures.
- 44.08 Implement and manage printing on a network.
- 44.09 Utilize network management infrastructures (e.g., network monitoring, alerting, security) to perform administrative tasks.
- 44.10 Identify common backup strategies and procedures.

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STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207050
Course Title: Networking 4
Course Credit: 1

COURSE DESCRIPTION:

This course continues the study of network support services. The content includes installation of network server operating system and client software, network administrative tasks, e-mail server software, network security and troubleshooting, installation and configuration of software applications on file servers, training of end users, and Internet/Intranet publishing. After successful completion of this course, students will have met Occupational Completion Point - Data Code E, Network Administrator - DOT Code 031.132-010.

MANAGEMENT

08.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:

08.17 Develop strategies for resolving customer conflicts.

WORK-BASED LEARNING

20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES—The student will be able to:

20.29 Participate in work-based learning experiences in a network support services environment.

20.30 Discuss the use of technology in a network support services environment.

20.32 Discuss the management/supervisors skills needed in a network support services environment.

NETWORK/SOFTWARE SUPPORT

37.0 PERFORM END USER SUPPORT AND ASSISTANCE BY TROUBLESHOOTING AND DIAGNOSING THROUGH TELEPHONE, E-MAIL, REMOTE ACCESS, OR DIRECT CONTACT—The student will be able to:

37.12 Apply procedures for remote access response to user requests for assistance.

39.0 PERFORM RECORDS MANAGEMENT AND MAINTENANCE ACTIVITIES—The student will be able to:

39.04 Design, create, and maintain a database of all service incidents.

41.0 PERFORM E-MAIL ACTIVITIES—The student will be able to:

41.07 Identify and describe different e-mail server packages.

41.08 Demonstrate proficiency in the installation, configuration, and management of e-mail server software.

44.0 DEMONSTRATE PROFICIENCY USING COMPUTER NETWORKS—The student will be able to:

44.05 Perform installation of network server operating system and client software.

44.11 Apply common backup strategies and procedures.

44.12 Perform network documentation activities.

44.13 Identify network troubleshooting methods.

44.14 Install and configure software applications on the file server for user access.

44.15 Implement and manage network security.

44.16 Understand and manage network bandwidths (e.g., pushing files across the network).

44.17 Perform network administrative tasks using network management products.

44.18 Identify and differentiate tiers in a network management infrastructure (e.g., web-based browsers, point products, enterprise/computer associates).

45.0 PROVIDE TRAINING TO USERS—The student will be able to:

45.03 Develop methods for training users to access network information and resources.

45.04 Develop methods for training users to use e-mail.

46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:

46.04 Exhibit proficiency in publishing Internet and Intranet documents.