

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: PC Support Services
Program Type: Job Preparatory
Occupational Area: Business Technology Education
Components: Four Occupational Completion Points Including
 Core

	Secondary	PSAV
Program Number:	8207340	B070400
CIP Number:	0507.030502	0507.030502
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 BUS DP @7 ELECT DP @7 BOOKKEEPIN @4 @ 7 CLERICAL @ 7 SECRETAR @ 7 ACCTING @ 7 MANAG SUPV @ 7	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 ACCTING @7 G MANAG SUPV @7
[Intro to IT, OCP B, C and D Only:] Additional certification accepted:	COMP SCI @6 @2	COMP SCI @6 @2
CSO:	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
SOC Code:	15-1041	

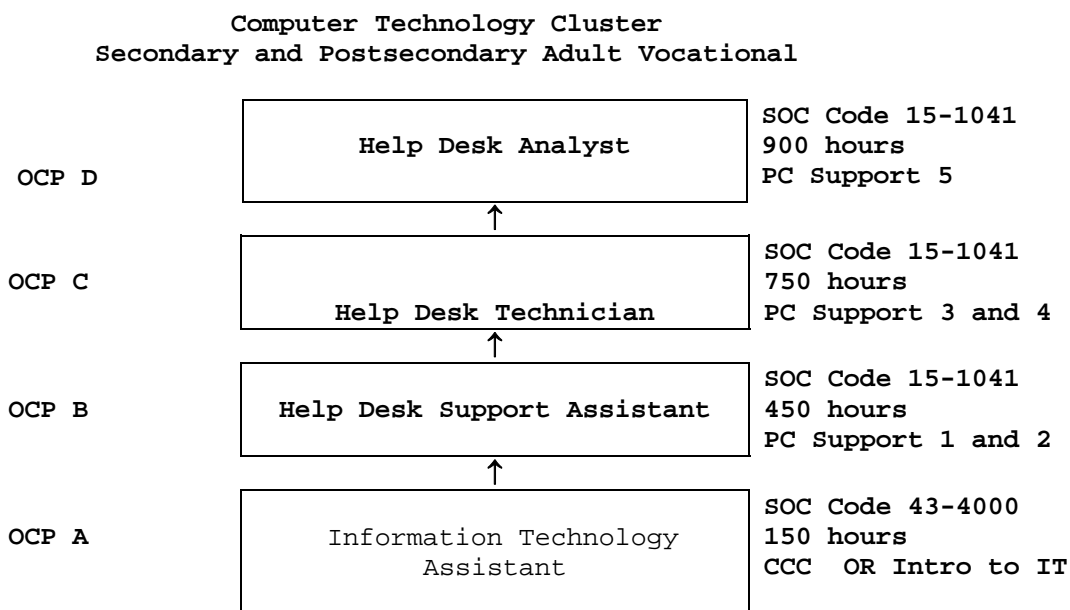
- I. **PURPOSE:** This program is designed to prepare students for employment as an Information Technology Assistant, Help Desk Support Assistant, Help Desk Specialist (Help Desk Technician), and Help Desk Analyst.

This program offers a broad foundation of knowledge and skills to prepare students for employment in PC support services positions. The content includes software applications and operating systems including the use of advanced software/system features and programs; electronic communication via the Internet; Web page components; computer networking and network administration; the interrelationships among major components of networks; hardware and software selection and installation; integration techniques to enhance projects; and preventative hardware maintenance.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the PC 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 (Computing for College and Careers or Introduction to Information Technology - Information Technology Assistant - OCP A) 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 PC Support Services program structure:



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

- Business Technology Education Core
8209020 - Computing for College and Careers
OR
8207310 - Introduction to Information Technology
8207210 - PC Support 1
8207220 - PC Support 2
8207230 - PC Support 3
8207240 - PC Support 4
8207250 - PC Support 5

- III. **LABORATORY ACTIVITIES**: Laboratory activities are an integral part of this program and include the use of keyboarding systems, computers, computer software, and peripheral equipment.
- IV. **SPECIAL NOTES**: Future Business Leaders of America (Secondary) and Phi Beta Lambda (Postsecondary), and Business Professionals of America are the appropriate Career Student Organizations (CTSO) for providing leadership training and for reinforcing specific career and technical skills. Career 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.

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.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

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.

21st-Century Skills: Instructional strategies for this program must include methods that require students to acquire 1. Digital-Age Literacy - basic scientific, mathematical, and technological literacies - visual and information literacies - cultural literacy and global awareness; 2. Inventive Thinking - adaptability/ability to manage complexity - curiosity, creativity, and risk taking - higher order thinking and sound reasoning; 3. Effective Communication - teaming, collaboration, and interpersonal skills - personal and social responsibility - interactive communication; 4. High Productivity - ability to prioritize, plan, and manage for results - effective use of real-world tools - relevant, high-quality products.

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

- V. **INTENDED OUTCOMES**: After completing the following competencies, the student will have achieved the occupational completion point of General Office Clerk (Information Technology Assistant) and the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A SOC Code 43-4000

Computing for College and Careers competencies:

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 01.01, 01.02, 01.03, 01.04, 01.05, 01.06, 01.07, 01.08.]
- 02.0 Demonstrate comprehension and communication skills. [Student Performance Standards: 02.01, 02.02, 02.04, 02.05, 02.05, 02.06, 02.07.]
- 03.0 Use technology to apply and enhance communication skills in technical reading, writing. [Student Performance Standards: 03.01, 03.02, 03.03, 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 and professional 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 and attributes appropriate for the workplace. [Student Performance Standards: [10.01, 10.02, 10.03.]
- 13.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 13.02.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.09.]
- 42.0 Demonstrate operating systems. [Student Performance Standards: 42.01, 42.10, 42.12, 42.14.]
- 67.0 Develop an awareness of emerging technologies. [Student Performance Standards: 67.01, 67.02, 67.03.]

OR

Introduction to IT Competencies:

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 01.01, 01.02, 01.03, 01.04, 01.06, 01.07.]
- 02.0 Demonstrate Comprehension and communication skills. [Student Performance Standards: 02.03, 02.62, 02.63, 02.64, 02.65, 02.66.]
- 03.0 Use technology to enhance the effectiveness of communication skills. [Student Performance Standards: 03.03, 03.06.]
- 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. [Student Performance Standards: 04.01, 04.02.]
- 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: 06.03.]
- 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: 08.02, 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. [Student Performance Standards: 09.15, 09.16, 09.17, 09.18, 09.19, 09.20.]
- 10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace. [Student Performance Standards: 10.01, 10.03.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.44, 20.46.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.02, 41.03, 41.04, 41.05, 41.06, 41.07, 41.08, 41.09, 41.10, 41.11, 41.12, 41.13.]
- 42.0 Demonstrate knowledge of different operating systems. [Student Performance Standards: 42.01, 42.10, 42.12, 42.14.]
- 55.0 Demonstrate proficiency navigating the internet, intranet, and the WWW. [Student Performance Standards: 55.01, 55.10, 55.11, 55.14, 55.15, 55.16, 55.17, 55.18.]
- 56.0 Demonstrate proficiency using HTML commands. [Student Performance Standards: 56.01, 56.02, 56.03, 56.04, 56.05, 56.06, 56.08, 56.17, 56.18, 56.19.]
- 57.0 Demonstrate proficiency in page design applicable to the WWW. [Student Performance Standards: 57.01, 57.02, 57.04, 57.05, 57.25, 57.26, 57.27.]
- 63.0 Demonstrate proficiency using specialized web design software. [Student Performance Standards: 63.01, 63.02.]
- 64.0 Develop an awareness of the information technology industry. [Student Performance Standards: 64.01, 64.04, 64.05.]
- 65.0 Develop an awareness of microprocessors and digital computers. [Student Performance Standards: 65.01, 65.02, 65.03, 65.04, 65.05, 65.06, 65.07, 65.08.]
- 66.0 Develop an awareness of programming languages. [Student Performance Standards: 66.01, 66.02, 66.03, 66.04.]
- 67.0 Develop an awareness of emerging technologies. [Student Performance Standards: 67.01, 67.02, 67.03.]
- 69.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model. [Student Performance Standards: 69.01, 69.02, 69.04, 69.06, 69.07, 69.08, 69.09, 69.11.]
- 70.0 Demonstrate proficiency using common software applications. [Student Performance Standards: 70.01, 70.02.]
- 71.0 Demonstrate proficiency using specialized software applications. [Student Performance Standards: 71.01, 71.02, 71.06.]

OCCUPATIONAL COMPLETION POINT - DATA CODE B

HELP DESK SUPPORT ASSISTANT - SOC Code 15-1041

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

- 01.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.14, 02.19, 02.20.02.44.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.33, 20.34, 20.35.]
- 37.0 Perform end user support and assistance by troubleshooting and diagnosing through telephone, e-mail, remote access, or direct contact. [Student Performance Standard: 37.01, 37.02.]
- 38.0 Perform installation and configuration activities. [Student Performance Standards: 38.03, 38.04, 38.05, 38.06.]
- 40.0 Identify the purpose of and interrelationships among major hardware components. [Student Performance Standards: 40.07, 40.08, 40.09.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.02, 41.03, 41.04, 41.05, 41.09]
- 44.0 Demonstrate an understanding of computer networks. [Student Performance Standards: 44.01, 44.03.]
- 45.0 Develop electronic communications skills. [Student Performance Standards: 46.01, 46.06, 46.07, 46.08.]
- 46.0 Develop electronic communications skills: [Student Performance Standards: 46.01, 46.06, 46.07.]
- 47.0 Demonstrate an understanding of system software and application software. [Student Performance Standards: 47.01, 47.02, 47.03, 47.04.]

OCCUPATIONAL COMPLETION POINT - DATA CODE C

HELP DESK TECHNICIAN - SOC Code 15-1041

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 Help Desk Specialist and the student will be able to:

- 02.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standard: 02.20, 02.21, 02.54.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standard: 20.33, 20.35, 20.36.]
- 38.0 Perform installation and configuration activities. [Student Performance Standards: 38.07, 38.09.]
- 40.0 Identify the purpose of and interrelationships among major hardware components. [Student Performance Standard: 40.07, 40.10.]
- 44.0 Demonstrate proficiency using computer networks. [Student Performance Standards: 44.02, 44.04, 44.06.]

- 46.0 Develop electronic communications skills. [Student Performance Standards: 46.09, 46.10, 46.11, 46.12.]
- 47.0 Demonstrate proficiency using system software and application software. [Student Performance Standards: 47.02, 47.05, 47.06, 47.07, 47.08]

OCCUPATIONAL COMPLETION POINT - DATA CODE D

HELP DESK ANALYST - SOC Code 15-1041

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 Help Desk Analyst and the student will be able to:

- 02.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.10.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.33.]
- 38.0 Perform installation and configuration activities. [Student Performance Standards: 38.08.]
- 44.0 Demonstrate proficiency using computer networks. [Student Performance Standards: 44.02.]
- 47.0 Demonstrate proficiency using system software and application software. [Student Performance Standards: 47.08.]
- 78.0 Develop telephone skills and techniques relevant to customer care services. [Student Performance Standards: 78.02, 78.03.]

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: PC Support Services

Secondary Number: 8207400

Postsecondary Number: B070400

OCCUPATIONAL COMPLETION POINT - DATA CODE A

INFORMATION TECHNOLOGY ASSISTANT- SOC Code 43-4000

Computing for College and Careers competencies :

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:

- 01.01 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 computer file management skills. (LA.A.2.4.2, LA.B.2.4.4, LA.B.2.4.6)
- 01.06 Troubleshoot problems with computer 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 DEMONSTRATE COMPREHENSION AND COMMUNICATION SKILLS-The student will be able to:

- 02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
- 02.02 Write clear and well-organized research papers, integrating a variety of information.
- 02.03 Prepare and deliver an oral report with appropriate materials to the class
- 02.04 Participate in large group discussions as a member and/or a leader.

- 02.05 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.06 Accurately follow written and oral instructions.
- 02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATION SKILLS-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 and 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 communication. (LA.B.2.4.1, LA.B.2.4.2)
- 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-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.

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 skills, 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).

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.

MATHEMATICS AND FINANCE

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-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 situations 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-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, and follow-up). (LA.C.3.4.4)
- 09.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
- 09.05 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 Build mentor relationships with local professionals in the industry.

HUMAN RELATIONS/INTERPERSONAL SKILLS

- 10.0 DEMONSTRATE HUMAN RELATIONS/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 conflicts in work situations. (LA.D.1.4.2, SS.B.1.4.5)
 - 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

ADMINISTRATIVE PROCEDURES

- 13.0 PERFORM FUNCTIONS AND RESPONSIBILITIES TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE-The student will be able to:
 - 13.02 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.).

NETWORK/SOFTWARE SUPPORT

- 41.0 PERFORM E-MAIL ACTIVITIES-The student will be able to:
 - 41.01 Describe e-mail capabilities and functions.
 - 41.09 Use the Internet to perform e-mail activities.
- 42.0 DEMONSTRATE OPERATING SYSTEMS-The student will be able to:
 - 42.01 Identify operating system file naming conventions.

- 42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 42.12 Demonstrate a working knowledge of standard file formats.
- 42.14 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

INFORMATION TECHNOLOGY

67.0 DEVELOP AN AWARENESS OF EMERGING TECHNOLOGIES-The student will be able to:

- 67.01 Compare and contrast various methods of evaluation for emerging technologies.
- 67.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
- 67.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

OR

Introduction to Information Technology competencies:

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:

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 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.
- 01.05 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.

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:

- 02.03 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
- 02.62 Organize ideas and communicate oral and written messages appropriate for information technology environments.

- 02.63 Collaborate with individuals and teams to complete tasks and solve information technology problems.
 - 02.64 Identify, define, and discuss professional information technology terminology appropriate for internal and external communications in an information technology environment.
 - 02.65 Apply the writing process to the creation of appropriate documents following designated business formats.
 - 02.66 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).
- 03.0 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATION SKILLS-The student will be able to:
- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance 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-The student will be able to:
- 04.01 Explore, design, implement, and evaluate organizational structures and cultures. 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.
 - 04.02 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.
- 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 skills, 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).
- 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:

- 06.03 Demonstrate awareness of the following workplace essentials: Quality customer service; business ethics; confidentiality of information; copyright violations; accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.

MATHEMATICS AND FINANCE

- 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-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.
- 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
- 07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

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:

- 08.02 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-The student will be able to:

- 09.15 Research, compare, and contrast information technology career clusters (e.g., characteristics needed, skills required, education required, industry certifications, advantages and disadvantages of information technology careers, the need for information technology workers, etc.).
- 09.16 Describe the variety of occupations and professions within the world of information technology including those where information technology is either in a primary focus or in a supportive role.
- 09.17 Describe job requirements for the variety of occupations and professions within the global world of information technology.

- 09.18 Analyze personal skills and aptitudes in comparison with information technology career opportunities.
 - 09.19 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
 - 09.20 Develop and maintain an electronic career portfolio, to include, but not limited to the Resume and Letter of Application.
- 10.0 DEMONSTRATE HUMAN RELATIONS/INTERPERSONAL SKILLS APPROPRIATE FOR THE WORKPLACE-The student will be able to:
- 10.01 Accept constructive criticism.
 - 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

WORK-BASED LEARNING

- 20.0 PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES-The student will be able to:
- 20.44 Participate in work-based learning experiences in an information technology environment.
 - 20.46 Discuss the use of technology in an information technology environment.

NETWORK/SOFTWARE SUPPORT

- 41.0 PERFORM E-MAIL ACTIVITIES-The student will be able to:
- 41.01 Describe e-mail capabilities and functions.
 - 41.02 Identify components of an e-mail message.
 - 41.03 Identify the components of an e-mail address.
 - 41.04 Identify when to use different e-mail options.
 - 41.05 Attach a file to an e-mail message.
 - 41.06 Forward an e-mail message.
 - 41.07 Use an address book.
 - 41.08 Reply to an e-mail message.
 - 41.09 Use the Internet to perform e-mail activities.
 - 41.10 Identify the appropriate use of e-mail and demonstrate related e-mail etiquette.
 - 41.12 Identify when to include information from an original e-mail message in a response.
 - 41.13 Identify common problems associated with widespread use of e-mail.
- 42.0 DEMONSTRATE KNOWLEDGE OF DIFFERENT OPERATING SYSTEMS-The student will be able to:
- 42.01 Identify operating system file naming conventions.
 - 42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
 - 42.12 Demonstrate a working knowledge of standard file formats.

- 42.14 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

WEB DESIGN

- 55.0 DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW-The student will be able to:

- 55.01 Identify and describe Web terminology.
- 55.10 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
- 55.11 Define Universal Resource Locators (URLs) and associated protocols (e.g., .com, .org, .edu, .gov, .net, .mil).
- 55.14 Describe and observe Internet/Intranet ethics and copyright laws and regulatory control.
- 55.15 Trace the evolution of the Internet from its inception to the present and into the future.
- 55.16 Demonstrate proficiency using search engines (e.g., Yahoo!, Google, Northern Light, Lycos, Excite, etc.).
- 55.17 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF, etc.).
- 55.18 Identify effective Boolean search strategies.

- 56.0 DEMONSTRATE PROFICIENCY USING HTML COMMANDS-The student will be able to:

- 56.01 Identify elements of a Web page.
- 56.02 Describe individual Web page layouts and content (e.g., writing for the Web, Web structure).
- 56.03 Define basic HTML terminology.
- 56.04 Analyze HTML source code developed by others.
- 56.05 Create Web pages using basic HTML tags (e.g., links, lists, character styles, text alignment, and tables).
- 56.06 Use storyboarding techniques for subsequent Web pages (e.g., linear, hierarchical).
- 56.08 Edit and test HTML documents for accuracy and validity.
- 56.17 Use basic functions of WYSIWYG editors.
- 56.18 Use basic functions of HTML, DHTML, and XML editors and converters.
- 56.19 Enhance web pages through the addition of images and graphics including animation.

- 57.0 DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICABLE TO THE WWW-The student will be able to:

- 57.01 Develop an awareness of acceptable Web page design, including index pages in relation to the rest of the Web site.
- 57.02 Describe and apply color theory as it applies to Web page design (e.g., background and text color).
- 57.04 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD ROMs).
- 57.05 Use image design software to create and edit images.

- 57.25 Demonstrate proficiency in publishing to the Internet.
- 57.26 Demonstrate proficiency in adding downloadable forms to web pages.
- 57.27 Explain the need for web-based applications.

63.0 DEMONSTRATE PROFICIENCY USING SPECIALIZED WEB DESIGN SOFTWARE-The student will be able to:

- 63.01 Compare and contrast various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).
- 63.02 Demonstrate use of various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

INFORMATION TECHNOLOGY

64.0 DEVELOP AN AWARENESS OF THE INFORMATION TECHNOLOGY INDUSTRY-The student will be able to:

- 64.01 Explain how information technology impacts the operation and management of business and society.
- 64.04 Explain the emergence of e-commerce and e-government and the potential impact on business and society.
- 64.05 Explain the emergence of a paperless society.

65.0 DEVELOP AN AWARENESS OF MICROPROCESSORS AND DIGITAL COMPUTERS-The student will be able to:

- 65.01 Describe the evolution of the digital computer.
- 65.02 Explain the general architecture of a microcomputer system.
- 65.03 Explain the evolution of microprocessors.
- 65.04 Explain software hierarchy and its impact on microprocessors.
- 65.05 Explain the need for and use of peripherals.
- 65.06 Demonstrate proficiency using peripherals.
- 65.07 Identify the basic concepts of computer maintenance and upgrades.
- 65.08 Differentiate between diagnosing and troubleshooting.

66.0 DEVELOP AN AWARENESS OF PROGRAMMING LANGUAGES-The student will be able to:

- 66.01 Explain the history of programming languages.
- 66.02 Explain the need for and use of compilers.
- 66.03 Explain how compilers work.
- 66.04 Identify the three types of programming design approaches (e.g., top-down, structured, and object-oriented).

67.0 DEVELOP AN AWARENESS OF EMERGING TECHNOLOGIES-The student will be able to:

- 67.01 Compare and contrast various methods of evaluation for emerging technologies.
- 67.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
- 67.03 Compare and contrast emerging technologies and describe how they impact business in the global marketplace (e.g.,

wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

69.0 DEMONSTRATE AN UNDERSTANDING OF THE SEVEN LAYERS OF THE OPEN SYSTEMS INTERFACE (OSI) MODEL-The student will be able to:

- 69.01 Describe the evolution of OSI from its inception to the present and into the future.
- 69.02 Explain the interrelations of the seven layers of the Open Systems Interface (OSI) as it relates to hardware and software.
- 69.04 Identify types of networks and how they work.
- 69.06 Identify the role of servers and clients on a network.
- 69.07 Identify benefits and risks of networked computing.
- 69.08 Identify the relationship between computer networks and other communications networks (i.e. telephone systems).
- 69.09 Identify Intranets, Extranets and how they relate to the Internet.
- 69.11 Demonstrate basic understanding of network administration.

SOFTWARE APPLICATIONS

70.0 DEMONSTRATE PROFICIENCY USING COMMON SOFTWARE APPLICATIONS-The student will be able to:

- 70.01 Compare and contrast the appropriate use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music, etc.).
- 70.02 Demonstrate proficiency in the use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music, etc.).

71.0 DEMONSTRATE PROFICIENCY USING SPECIALIZED SOFTWARE APPLICATIONS-The student will be able to:

- 71.01 Compare and contrast the appropriate use of specialized software applications (e.g., OLTP, Computer Aided Design, Computer Aided Manufacturing, 3D animation process control, materials management, etc.).
- 71.02 Demonstrate awareness of specialized software applications (e.g., OLTP, Computer Aided Design, Computer Aided Manufacturing, 3D animation, process control, materials management, etc.)
- 71.06 Demonstrate the ability to incorporate digital sound.

OCCUPATIONAL COMPLETION POINT B

HELP DESK SUPPORT ASSISTANT - SOC Code 15-1041

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

WORKPLACE COMMUNICATIONS

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

- 02.14 Communicate in a multicultural setting (e.g., with people from varying international, cultural, ethnic, and racial backgrounds).
- 02.19 Communicate technical information in a concise, understandable manner to a non-technical audience both verbally and in writing.
- 02.20 Contribute technical solutions to a resource library.
- 02.44 Demonstrate active listening techniques.

WORK-BASED LEARNING

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

- 20.33 Participate in work-based learning experiences in a PC/software support services environment.
- 20.34 Discuss the use of technology in a PC/software support services environment.
- 20.35 Compare and contrast the software applications used in a PC/software 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 Apply appropriate communication etiquette in responding to user requests for assistance in a timely manner.
- 37.02 Demonstrate patience, active listening skills, and probing skills in responding to user requests for assistance.

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

- 38.03 Interpret error messages properly.
- 38.04 Install operating system software.
- 38.05 Customize operating systems.
- 38.06 Install application software.

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

- 40.07 Demonstrate an understanding of the operation and purpose of hardware components.
- 40.08 Demonstrate proficiency in basic preventative hardware maintenance.
- 40.09 Apply basic rules for hardware safety.

- 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.
 - 41.09 Use the Internet to perform e-mail activities.
- 44.0 DEMONSTRATE AN UNDERSTANDING OF COMPUTER NETWORKS—The student will be able to:
- 44.01 Define networking and describe the purpose of a network.
 - 44.03 Describe the various types of network topologies.
- 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.
 - 46.06 Identify the types of electronic communications software and hardware and explain their functions and use.
 - 46.07 Exhibit proficiency in using various features of a browser.
 - 46.08 Demonstrate ethical use of the Internet.
- 47.0 DEMONSTRATE AN UNDERSTANDING OF SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:
- 47.01 Perform word processing, spreadsheet, database, presentation, desktop publishing, and accounting activities with software commonly used in business.
 - 47.02 Identify software problems to execute appropriate course of action.
 - 47.03 Diagnose software problems to execute appropriate course of action.
 - 47.04 Perform system backup.

OCCUPATIONAL COMPLETION POINT - DATA CODE C

HELP DESK SPECIALIST - SOC Code 15-1041

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

WORKPLACE COMMUNICATIONS

- 02.0 USE TECHNOLOGY TO APPLY COMMUNICATION SKILLS IN TECHNICAL READING, WRITING, SPEAKING, LISTENING, AND VIEWING—The student will be able to:
- 02.20 Contribute technical solutions to a resource library.
 - 02.21 Collaborate with associates to resolve user technical difficulties.
 - 02.22 Use appropriate etiquette and manners when communicating with people of varying cultures.

WORK-BASED LEARNING

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

- 20.33 Participate in work-based learning experiences in a PC/software support services environment.
- 20.35 Compare and contrast the software applications used in a PC/software support services environment.
- 20.36 Discuss the management/supervisory skills needed in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

- 38.07 Install and configure software including device drivers.
- 38.09 Resolve computer error messages.

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

- 40.07 Demonstrate an understanding of the operation and purpose of hardware components.
- 40.10 Demonstrate preventative hardware maintenance.

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

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

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

- 46.09 Select and use appropriate electronic communications software and hardware for specific tasks.
- 46.10 Compare and contrast Internet software and protocols.
- 46.11 Diagnose and resolve electronic communications operational problems.
- 46.12 Identify the components of a Web page.

47.0 DEMONSTRATE PROFICIENCY USING SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:

- 47.02 Identify software problems to execute appropriate course of action

- 47.05 Perform advanced word processing, spreadsheet, database, presentation, desktop publishing, and accounting activities with software commonly used in business.
- 47.06 Refine and resolve software performance issues using advanced software/system features and programs.
- 47.07 Apply integration techniques to enhance business software application projects.
- 47.08 Describe knowledge database search procedures used to identify possible solutions when troubleshooting software and hardware problems.

OCCUPATIONAL COMPLETION POINT - DATA CODE D

HELP DESK ANALYST - SOC Code 15-1041

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

WORKPLACE COMMUNICATIONS

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

- 02.10 Determine when more information is needed and ask appropriate questions.

WORK-BASED LEARNING

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

- 20.33 Participate in work-based learning experiences in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

- 38.08 Perform procedures for installing and replacing hardware.

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

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

47.0 DEMONSTRATE PROFICIENCY USING SYSTEM SOFTWARE AND APPLICATION SOFTWARE— The student will be able to:

- 47.08 Describe knowledge database search procedures used to identify possible solutions when troubleshooting software and hardware problems.

78.0 DEVELOP TELEPHONE SKILLS AND TECHNIQUES RELEVANT TO CUSTOMER CARE SERVICES-The student will be able to:

78.02 Apply call center vocabulary.

78.03 Listen and input information simultaneously.

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Secondary Course Number: 8209020
Course Title: Computing for College and Careers
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 basics 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 work place proficiency in an information-based society. This also includes proficiency with computers using databases, spreadsheets, presentation applications, and the integration of these programs using software that meets industry standards. After successful completion of this core course, students will have met Occupational Completion Point - Data Code A, Information Technology Assistant, SOC Code 43- 4000.

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:

- 01.01 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 computer file management skills. (LA.A.2.4.2, LA.B.2.4.4, LA.B.2.4.6)
- 01.06 Troubleshoot problems with computer 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 DEMONSTRATE COMPREHENSION AND COMMUNICATION SKILLS-The student will be able to:

- 02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
- 02.02 Write clear and well-organized research papers, integrating a variety of information.
- 02.03 Prepare and deliver an oral report with appropriate materials to the class
- 02.04 Participate in large group discussions as a member and/or a leader.
- 02.05 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.06 Accurately follow written and oral instructions.
- 02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATION SKILLS-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 and 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 communication. (LA.B.2.4.1, LA.B.2.4.2)
- 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-The student will be able to:

- 04.04 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
- 04.05 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.
- 04.06 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.

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

05.03 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 skills, and decision-making skills).

05.04 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality 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:

06.04 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.

06.05 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.

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

MATHEMATICS AND FINANCE

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-The student will be able to:

07.04 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)

07.05 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)

07.06 Select and use the correct mathematical processes and tools 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

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-The student will be able to:

09.08 Analyze personal skills and aptitudes in comparison with various business related job and career options.

09.09 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.

09.10 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, and follow-up). (LA.C.3.4.4)

09.11 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.

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

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

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

09.08 Build mentor relationships with local professionals in the industry.

HUMAN RELATIONS/INTERPERSONAL SKILLS

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

10.04 Accept constructive criticism. (SS.B.1.4.5)

10.05 Apply appropriate strategies to manage and resolve conflicts in work situations. (LA.D.1.4.2, SS.B.1.4.5)

10.06 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

ADMINISTRATIVE PROCEDURES

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

- 13.02 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.).

NETWORK/SOFTWARE SUPPORT

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

- 41.01 Describe e-mail capabilities and functions.
41.09 Use the Internet to perform e-mail activities.

- 42.0 DEMONSTRATE OPERATING SYSTEMS-The student will be able to:

- 42.01 Identify operating system file naming conventions.
42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
42.12 Demonstrate a working knowledge of standard file formats.
42.14 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

INFORMATION TECHNOLOGY

- 67.0 DEVELOP AN AWARENESS OF EMERGING TECHNOLOGIES-The student will be able to:

- 67.01 Compare and contrast various methods of evaluation for emerging technologies.
67.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
67.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

**Florida Department of Education
STUDENT PERFORMANCE STANDARDS**

Course Number: 8207310
Course Title: Introduction to Information Technology
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry and basic web design concepts. The content includes information technology career research; operating systems and software applications; electronic communications including e-mail and Internet services; basic web commands and design; and emerging technologies. After successful completion of Introduction to Information Technology, students will have met Occupational Completion Point - Data Code A, General Office - OES 55321, SOC Code 43-9061.

INFORMATION SYSTEMS

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

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 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.
- 01.05 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.

WORKPLACE COMMUNICATIONS

02.0 DEMONSTRATE COMPREHENSION AND COMMUNICATION SKILLS-The student will be able to:

- 02.03 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
- 02.62 Organize ideas and communicate oral and written messages appropriate for information technology environments.
- 02.63 Collaborate with individuals and teams to complete tasks and solve information technology problems.
- 02.64 Identify, define, and discuss professional information

technology terminology appropriate for internal and external communications in an information technology environment.

- 02.65 Apply the writing process to the creation of appropriate documents following designated business formats.
- 02.66 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).

03.0 USE TECHNOLOGY TO ENHANCE THE EFFECTIVENESS OF COMMUNICATION SKILLS-The student will be able to:

- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance 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-The student will be able to:

- 04.01 Explore, design, implement, and evaluate organizational structures and cultures. 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.
- 04.02 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.

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 skills, 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).

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:

- 06.03 Demonstrate awareness of the following workplace essentials: Quality customer service; business ethics; confidentiality of information; copyright violations;

accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.

MATHEMATICS AND FINANCE

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-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.
- 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
- 07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

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:

- 08.02 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-The student will be able to:

- 09.15 Research, compare, and contrast information technology career clusters (e.g., characteristics needed, skills required, education required, industry certifications, advantages and disadvantages of information technology careers, the need for information technology workers, etc.).
- 09.16 Describe the variety of occupations and professions within the world of information technology including those where information technology is either in a primary focus or in a supportive role.
- 09.17 Describe job requirements for the variety of occupations and professions within the global world of information technology.
- 09.18 Analyze personal skills and aptitudes in comparison with information technology career opportunities.
- 09.19 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.

09.20 Develop and maintain an electronic career portfolio, to include, but not limited to the Resume and Letter of Application.

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

10.01 Accept constructive criticism.

10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

WORK-BASED LEARNING

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

20.44 Participate in work-based learning experiences in an information technology environment.

20.46 Discuss the use of technology in an information technology environment.

NETWORK/SOFTWARE SUPPORT

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

41.01 Describe e-mail capabilities and functions.

41.02 Identify components of an e-mail message.

41.03 Identify the components of an e-mail address.

41.04 Identify when to use different e-mail options.

41.05 Attach a file to an e-mail message.

41.06 Forward an e-mail message.

41.07 Use an address book.

41.08 Reply to an e-mail message.

41.09 Use the Internet to perform e-mail activities.

41.10 Identify the appropriate use of e-mail and demonstrate related e-mail etiquette.

41.12 Identify when to include information from an original e-mail message in a response.

41.13 Identify common problems associated with widespread use of e-mail.

42.0 DEMONSTRATE KNOWLEDGE OF DIFFERENT OPERATING SYSTEMS-The student will be able to:

42.01 Identify operating system file naming conventions.

42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).

42.12 Demonstrate a working knowledge of standard file formats.

42.14 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

WEB DESIGN

55.0 DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW—The student will be able to:

- 55.01 Identify and describe Web terminology.
- 55.10 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
- 55.11 Define Universal Resource Locators (URLs) and associated protocols (e.g., .com, .org, .edu, .gov, .net, .mil).
- 55.14 Describe and observe Internet/Intranet ethics and copyright laws and regulatory control.
- 55.15 Trace the evolution of the Internet from its inception to the present and into the future.
- 55.16 Demonstrate proficiency using search engines (e.g., Yahoo!, Google, Northern Light, Lycos, Excite, etc.).
- 55.17 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF, etc.).
- 55.18 Identify effective Boolean search strategies.

56.0 DEMONSTRATE PROFICIENCY USING HTML COMMANDS—The student will be able to:

- 56.01 Identify elements of a Web page.
- 56.02 Describe individual Web page layouts and content (e.g., writing for the Web, Web structure).
- 56.03 Define basic HTML terminology.
- 56.04 Analyze HTML source code developed by others.
- 56.05 Create Web pages using basic HTML tags (e.g., links, lists, character styles, text alignment, and tables).
- 56.06 Use storyboarding techniques for subsequent Web pages (e.g., linear, hierarchical).
- 56.08 Edit and test HTML documents for accuracy and validity.
- 56.17 Use basic functions of WYSIWYG editors.
- 56.18 Use basic functions of HTML, DHTML, and XML editors and converters.
- 56.19 Enhance web pages through the addition of images and graphics including animation.

57.0 DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICABLE TO THE WWW—The student will be able to:

- 57.01 Develop an awareness of acceptable Web page design, including index pages in relation to the rest of the Web site.
- 57.02 Describe and apply color theory as it applies to Web page design (e.g., background and text color).
- 57.04 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD ROMs).
- 57.05 Use image design software to create and edit images.
- 57.25 Demonstrate proficiency in publishing to the Internet.
- 57.26 Demonstrate proficiency in adding downloadable forms to web pages.
- 57.27 Explain the need for web-based applications.

63.0 DEMONSTRATE PROFICIENCY USING SPECIALIZED WEB DESIGN SOFTWARE-The student will be able to:

63.01 Compare and contrast various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

63.02 Demonstrate use of various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

INFORMATION TECHNOLOGY

64.0 DEVELOP AN AWARENESS OF THE INFORMATION TECHNOLOGY INDUSTRY-The student will be able to:

64.01 Explain how information technology impacts the operation and management of business and society.

64.04 Explain the emergence of e-commerce and e-government and the potential impact on business and society.

64.05 Explain the emergence of a paperless society.

65.0 DEVELOP AN AWARENESS OF MICROPROCESSORS AND DIGITAL COMPUTERS-The student will be able to:

65.01 Describe the evolution of the digital computer.

65.02 Explain the general architecture of a microcomputer system.

65.03 Explain the evolution of microprocessors.

65.04 Explain software hierarchy and its impact on microprocessors.

65.05 Explain the need for and use of peripherals.

65.06 Demonstrate proficiency using peripherals.

65.07 Identify the basic concepts of computer maintenance and upgrades.

65.08 Differentiate between diagnosing and troubleshooting.

66.0 DEVELOP AN AWARENESS OF PROGRAMMING LANGUAGES-The student will be able to:

66.01 Explain the history of programming languages.

66.02 Explain the need for and use of compilers.

66.03 Explain how compilers work.

66.04 Identify the three types of programming design approaches (e.g., top-down, structured, and object-oriented).

67.0 DEVELOP AN AWARENESS OF EMERGING TECHNOLOGIES-The student will be able to:

67.01 Compare and contrast various methods of evaluation for emerging technologies.

67.02 Demonstrate knowledge of the process of planning upgrades and changeovers.

67.03 Compare and contrast emerging technologies and describe how they impact business in the global marketplace (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

69.0 DEMONSTRATE AN UNDERSTANDING OF THE SEVEN LAYERS OF THE OPEN SYSTEMS INTERFACE (OSI) MODEL-The student will be able to:

- 69.01 Describe the evolution of OSI from its inception to the present and into the future.
- 69.02 Explain the interrelations of the seven layers of the Open Systems Interface (OSI) as it relates to hardware and software.
- 69.04 Identify types of networks and how they work.
- 69.06 Identify the role of servers and clients on a network.
- 69.07 Identify benefits and risks of networked computing.
- 69.08 Identify the relationship between computer networks and other communications networks (i.e. telephone systems).
- 69.09 Identify Intranets, Extranets and how they relate to the Internet.
- 69.11 Demonstrate basic understanding of network administration.

SOFTWARE APPLICATIONS

70.0 DEMONSTRATE PROFICIENCY USING COMMON SOFTWARE APPLICATIONS-The student will be able to:

- 70.01 Compare and contrast the appropriate use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music, etc.).
- 70.02 Demonstrate proficiency in the use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, Java applet, music, etc.).

71.0 DEMONSTRATE PROFICIENCY USING SPECIALIZED SOFTWARE APPLICATIONS-The student will be able to:

- 71.01 Compare and contrast the appropriate use of specialized software applications (e.g., OLTP, Computer Aided Design, Computer Aided Manufacturing, 3D animation process control, materials management, etc.).
- 71.02 Demonstrate awareness of specialized software applications (e.g., OLTP, Computer Aided Design, Computer Aided Manufacturing, 3D animation, process control, materials management, etc.)
- 71.06 Demonstrate the ability to incorporate digital sound.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207210
Course Title: PC Support 1
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to develop entry-level skills for PC support services. Emphasis is placed on developing an understanding of various computer software applications and computer hardware. After successful completion of PC Support 1 and 2, students will have met Occupational Completion Point - Data Code B, Help Desk Support Assistant - SOC Code 15-1041

WORKPLACE COMMUNICATIONS

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

02.14 Communicate in a multicultural setting (e.g., with people from varying international, cultural, ethnic, and racial backgrounds).

WORK-BASED LEARNING

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

20.33 Participate in work-based learning experiences in a PC/software support services environment.

20.34 Discuss the use of technology in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

38.04 Install operating system software.

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

40.07 Demonstrate an understanding of the operation and purpose of hardware components.

40.08 Demonstrate proficiency in basic preventative hardware maintenance.

40.09 Apply basic rules for hardware safety.

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.

46.06 Identify the types of electronic communications software and hardware and explain their functions and use.

46.07 Exhibit proficiency in using various features of a browser.

47.0 DEMONSTRATE AN UNDERSTANDING OF SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:

47.01 Perform word processing, spreadsheet, database, presentation, desktop publishing, and accounting activities with software commonly used in business.

47.02 Identify software problems to execute appropriate course of action.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207220
Course Title: PC Support 2
Course Credit: 1

COURSE DESCRIPTION:

This course continues the development of basic entry-level skills for PC support services. The content includes software applications and operating systems, electronic communication via the Internet, and an introduction to computer networking. After successful completion of PC Support 1 and 2, students will have met Occupational Completion Point - Data Code B, Help Desk Support Assistant - SOC Code 15-1041.

WORKPLACE COMMUNICATIONS

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

- 02.14 Communicate in a multicultural setting (e.g., with people from varying international, cultural, ethnic, and racial backgrounds).
- 02.19 Communicate technical information in a concise, understandable manner to a non-technical audience both verbally and in writing.
- 02.20 Contribute technical solutions to a resource library.
- 02.44 Demonstrate active listening techniques.

WORK-BASED LEARNING

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

- 20.33 Participate in work-based learning experiences in a PC/software support services environment.
- 20.34 Discuss the use of technology in a PC/software support services environment.
- 20.35 Compare and contrast the software applications used in a PC/software 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 Apply appropriate communication etiquette in responding to user requests for assistance in a timely manner.

- 37.02 Demonstrate patience, active listening skills, and probing skills in responding to user requests for assistance.
- 38.0 PERFORM INSTALLATION AND CONFIGURATION ACTIVITIES—The student will be able to:
 - 38.03 Interpret error messages properly.
 - 38.04 Install operating system software.
 - 38.05 Customize operating systems.
 - 38.06 Install application software.
- 40.0 IDENTIFY THE PURPOSE OF AND INTERRELATIONSHIPS AMONG MAJOR HARDWARE COMPONENTS—The student will be able to:
 - 40.07 Demonstrate an understanding of the operation and purpose of hardware components.
 - 40.08 Demonstrate proficiency in basic preventative hardware maintenance.
 - 40.09 Apply basic rules for hardware safety.
- 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.
 - 41.09 Use the Internet to perform e-mail activities.
- 44.0 DEMONSTRATE AN UNDERSTANDING OF COMPUTER NETWORKS—The student will be able to:
 - 44.01 Define networking and describe the purpose of a network.
 - 44.03 Describe the various types of network topologies.
- 46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:
 - 46.08 Demonstrate ethical use of the Internet.
- 47.0 DEMONSTRATE AN UNDERSTANDING OF SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:
 - 47.03 Diagnose software problems to execute appropriate course of action.
 - 47.04 Perform system backup.

July 2007

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207230
Course Title: PC Support 3
Course Credit: 1

COURSE DESCRIPTION:

This course continues the study of PC support services and is designed to develop advanced skills for employment. The content includes advanced software applications, the interrelationships among major components of networks, hardware installation, and selection of electronic communications software and hardware. After successful completion of PC Support 3 and 4, students will have met Occupational Completion Point - Data Code C - SOC Code 15-1041.

WORKPLACE COMMUNICATIONS

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

- 02.20 Contribute technical solutions to a resource library.
- 02.21 Collaborate with associates to resolve user technical difficulties.
- 02.22 Use appropriate etiquette and manners when communicating with people of varying cultures.

WORK-BASED LEARNING

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

- 20.33 Participate in work-based learning experiences in a PC/software support services environment.
- 20.35 Compare and contrast the software applications used in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

- 38.07 Install and configure software including device drivers.

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

- 40.07 Demonstrate an understanding of the operation and purpose of hardware components.

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

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:

46.09 Select and use appropriate electronic communications software and hardware for specific tasks.

46.10 Compare and contrast Internet software and protocols.

47.0 DEMONSTRATE PROFICIENCY USING SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:

47.02 Identify software problems to execute appropriate course of action.

47.05 Perform advanced word processing, spreadsheet, database, presentation, desktop publishing, and accounting activities with software commonly used in business.

July 2007

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207240
Course Title: PC Support 4
Course Credit: 1

COURSE DESCRIPTION:

This course continues the development of advanced skills for entry - level employment in PC support services positions. The content includes utilization of advanced software/system features and programs, integration techniques to enhance projects, network administration, components of Web pages, and preventative hardware maintenance. After successful completion of PC Support 3 and 4, students will have met Occupational Completion Point - Data Code C, Help Desk Specialist - SOC Code 15-1041.

WORKPLACE COMMUNICATIONS

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

02.21 Collaborate with associates to resolve user technical difficulties.

WORK-BASED LEARNING

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

20.33 Participate in work-based learning experiences in a PC/software support services environment.

20.36 Discuss the management/supervisory skills needed in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

38.09 Resolve computer error messages.

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

40.10 Demonstrate preventative hardware maintenance.

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

- 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).

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

- 46.11 Diagnose and resolve electronic communications operational problems.
- 46.12 Identify the components of a Web page.

47.0 DEMONSTRATE PROFICIENCY USING SYSTEM SOFTWARE AND APPLICATION SOFTWARE—The student will be able to:

- 47.06 Refine and resolve software performance issues using advanced software/system features and programs.
- 47.07 Apply integration techniques to enhance business software application projects.
- 47.08 Describe knowledge database search procedures used to identify possible solutions when troubleshooting software and hardware problems.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207250
Course Title: PC Support 5
Course Credit: 1

COURSE DESCRIPTION:

This course continues the development of advanced skills for entry - level employment in PC support services positions. The content includes utilization of advanced software/system features and programs, integration techniques to enhance projects, network administration, components of Web pages, and preventative hardware maintenance. After successful completion of PC Support 5, students will have met Occupational Completion Point - Data Code D, Help Desk Analyst - SOC Code 15-1041

WORKPLACE COMMUNICATIONS

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

2.10 Determine when more information is needed and ask appropriate questions.

WORK-BASED LEARNING

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

20.33 Participate in work-based learning experiences in a PC/software support services environment.

NETWORK/SOFTWARE SUPPORT

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

38.08 Perform procedures for installing and replacing hardware.

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

44.02 Identify the purposes and interrelationships among the major components of networks (e.g., servers, clients, transmission media, network operating system, network boards).

47.0 DEMONSTRATE PROFICIENCY USING SYSTEM SOFTWARE AND APPLICATION SOFTWARE-The student will be able to:

47.08 Describe knowledge database search procedures used to identify possible solutions when troubleshooting software and hardware problems.

78.0 DEVELOP TELEPHONE SKILLS AND TECHNIQUES RELEVANT TO CUSTOMER CARE SERVICES-The student will be able to:

78.02 Apply call center vocabulary.

78.03 Listen and input information simultaneously.