

July 2007 Business Technology Education Core

Each Business Technology Education program begins with a core. Districts have the option of selecting one of the three choices below to meet the core requirement in most Business Technology Education programs:

8209020 - Computing for College and Careers (1 credit) *OR*

8200320 - Keyboarding and Business Skills (1/2 credit)

plus

8200330 - Computer and Business Skills (1/2 credit) *OR*

8207310 - Introduction to Information Technology
(1 credit)

Copies of the course choices appear on the following pages.

Program exception to these options:

8207300 - **Academy of Information Technology** (This program requires 8207310 as the core course. Computing for College and Careers is not an acceptable substitute.)

Refer to CCC Crosswalk.pdf and IIT Crosswalk.pdf files for crosswalks to Sunshine State Standards and FCAT Standards in the core options courses.

July 2007

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

OCCUPATIONAL COMPLETION POINT - DATA CODE A - Information Technology
Assistant SOC Code 43-4000

Course Number: 8209020
Course Title: Computing for College and Careers
Course Credit: 1

Certification: BUS ED @4 1 @2 BUS DP @7 G
VOE @7 ELECT DP @7 G
TEACH CBE @7
TEC ELEC @7 G
STENOGRAPHY @4
TYPEWRITING @4
CLERICAL @7 G
SECRETARIAL @7 G
BOOKKEEPING @4 @7 G
TYPEWRITING @4

CTSO: FBLA
BPA
Coop Method: No
Apprenticeship: No
Facility Code: 211

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:
- 04.01 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.).

July 2007

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Keyboarding and Business Skills
Program Type: Practical Arts
Occupational Area: Business Technology Education

Secondary

Program Number: 8200320
CIP Number: 0507.0798PA
Grade Level: 9-12, 30, 31
Standard Length: .5 credits
Certification: BUS ED @4 1 @2
VOE @7
TEACH CBE @7
STENOG @4
TYPEWRIT @4
CLERICAL @7 G
SECRETAR @7 G
CSO: FBLA
BPA
Coop Method: No
Apprenticeship: No
Facility Code: 211

- I. **PURPOSE:** 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 word processing applications, so that they may be used as communication tools for enhancing personal and work place proficiency in an information-based society.
- Instructional experiences provided in this course do not necessarily prepare students for specific occupations.
- II. **LABORATORY ACTIVITIES:** Laboratory activities are an integral part of this course and include the use of computers and peripheral equipment.
- III. **SPECIAL NOTES:** Future Business Leaders of America (Secondary), Phi Beta Lambda (Postsecondary), and Business Professionals of America (BPA) are the appropriate Career Student Organizations (CSO) 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.

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.

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

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

- 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, 01.05.]
- 02.0 Demonstrate comprehension and communication skills. [Student Performance Standards: 02.01, 02.02, 02.04, 02.05, 02.06, 02.07, 02.08.]
- 03.0 Use technology to apply and enhance communication skills in technical reading, writing. [Student Performance Standards: 03.01, 03.02, 3.04, 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.]
- 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.]
- 10.0 Demonstrate personal and interpersonal skills 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.]

NOTE: *This course along with Computer and Business Skills is equivalent to Computing for College and Careers. Students should complete this course before enrolling in Computer and Business Skills.*

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Computer and Business Skills
Program Type: Practical Arts
Occupational Area: Business Technology Education

Secondary

Program Number: 8200330
CIP Number: 0507.0797PA
Grade Level: 9-12, 30, 31
Standard Length: .5 credits
Certification: BUS ED @4 1 @2
VOE @7
TEACH CBE @7
CLERICAL @7 G
SECRETAR @7 G
BUS DP @7 G
ELECT DP @7 G
TEC ELEC @7 G
BOOKKEEPIN @4 @7 G
TYPEWRIT @4
CTSO: FBLA
BPA
Coop Method: No
Apprenticeship: No
Facility Code: 211

I. **PURPOSE:** This course is designed 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 using databases, spreadsheets, presentation applications, and the integration of these programs using software that meets industry standards.

Instructional experiences provided in this course do not necessarily prepare students for specific occupations.

II. **LABORATORY ACTIVITIES:** Laboratory activities are an integral part of this course and include the use of computers and peripheral equipment.

III. **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.

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.

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

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

- 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, 01.06, 01.07, 01.08.]
- 02.0 Demonstrate comprehension and communication skills. [Student Performance Standards: 02.06, 02.07, 2.08.]
- 03.0 Use Technology to apply and enhance communications skills in technical reading, writing. [Student Performance Standards: 03.03, 03.05, 03.06.]
- 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 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.]
- 10.0 Demonstrate human relations/interpersonal skills 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: 13.01, 13.03.]
- 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]

NOTE: *This course along with Keyboarding and Business Skills is equivalent to Computing for College and Careers. Students should complete Keyboarding and Business Skills before enrolling in this course.*

**Florida Department of Education
CURRICULUM FRAMEWORK**

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

| | | | | | | | |
|----------------|------------|----|----|----|----------|----|----|
| Certification: | BUS ED | @4 | 1 | @2 | BUS DP | @7 | G |
| | VOE | @7 | | | ELECT DP | @7 | G |
| | TEACH CBE | @7 | | | COMP SCI | @6 | @2 |
| | TEC ELEC | @7 | G | | | | |
| | STENOG | @4 | | | | | |
| | TYPEWRIT | @4 | | | | | |
| | CLERICAL | @7 | G | | | | |
| | SECRETAR | @7 | G | | | | |
| | BOOKKEEPIN | @4 | @7 | G | | | |
| | TYPEWRIT | @4 | | | | | |

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 HTML, DHTML, and XML commands; emerging technologies; and Web page design. After successful completion of Introduction to Information Technology, 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.
- 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.