# Florida Department of Education CURRICULUM FRAMEWORK

Program Title: Program Type: Occupational Area: Components:	Job Prepara Business Te	chnology Edu	acation	including Core
<b>Program Number:</b> CIP Number: Grade Level: Standard Length: Certification:	Secondary 8207500 0507.039905 9-12, 30, 3 6 credits BUS ED VOE TEACH CBE BUS DP ELECT DP CLERICAL SECRETAR STENOG TEC ELEC		PSAV B070500 0507.039905 30, 31 1050 hours BUS ED VOE TEACH CBE BUS DP ELECT DP CLERICAL SECRETAR STENOG TEC ELEC	@4 1 @2 @7 @7 G @7 G @7 G @7 G @4 @7 G \$7 G
[OCP C, D, and E Only] Additional certifi- cation accepted:	COMP SCI	@6 @2	COMP SCI	@6 @2
cación acceptea.	com ber	60 62	COMM ART	@7
CTSO:	FBLA BPA		Phi Beta Lambda BPA	
Coop Method:	Yes		Yes	
Apprenticeship: Facility Code: Basic Skills:	No 212		No 212	
Math			9	
Language			9	
Reading			9	

I. **<u>PURPOSE</u>**: This program is designed to prepare students for employment as a General Office Clerk, HTML Coder, Web Graphic Designer, and Web Producer.

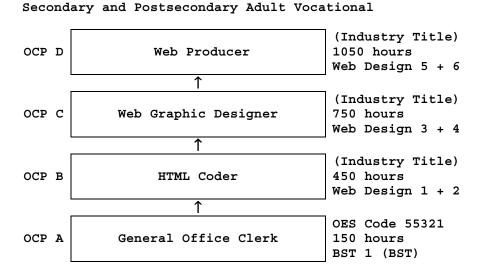
This program offers a broad foundation of knowledge and skills to prepare students for employment in Web Design Services positions. The content includes Operating System commands and Web document development, design, promotion and scripting.

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

II. PROGRAM STRUCTURE: This program is a planned sequence of instruction consisting of the Business Technology Education Core (Business Systems and Technology 1 - OCP A) and 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 Web/Internet/Intranet Services program structure:

Computer Technology Cluster



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

Business Technology Education Core
8209020 - Business Systems and Technology 1 (Business Systems and Technology)
8207110 - Web Design 1
8207120 - Web Design 2
8207130 - Web Design 3
8207140 - Web Design 4
8207150 - Web Design 5
8207160 - Web Design 6

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

Cooperative training - OJT is appropriate for this program. Whenever cooperative training - OJT is offered, the following are required for each student: a training plan, signed by the student, teacher, and employer, which includes instructional objectives and a list of on-thejob 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 1050 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.

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

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

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

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

# OCCUPATIONAL COMPLETION POINT - DATA CODE A

GENERAL OFFICE CLERK - OES Code 55321

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. [Student Performance Standards: 01.01, 01.02, 01.03, 01.04, 01.05, 01.06, 01.07, 01.08.]
- 02.0 Use technology to enhance communications in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.01, 02.02, 02.03, 02.04, 02.05.]
- 03.0 Use technology to apply and enhance communication skills in technical reading, writing. [Student Performance Standards: 03.01, 03.02, 03.03, 03.04, 03.05, 03.06.]
- 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy,

loyalty, honesty, cooperation, and punctuality as a team member. [Student Performance Standards: 04.01, 04.02, 04.03.]

- 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 05.01, 05.02.]
- 06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 06.01, 06.02, 06.03.]
- 07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 07.01, 07.02, 07.03.]
- 08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. [Student Performance Standards: 08.01, 08.02, 08.03.]
- 09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. [Student Performance Standards: 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08.]
- 10.0 Demonstrate personal and interpersonal skills appropriate for the workplace. [Student Performance Standards: [10.01, 10.02, 10.03.]
- 11.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 11.01, 11.02, 11.03.]

## OCCUPATIONAL COMPLETION POINT - DATA CODE B

HTML CODER - (Industry Title)

Intended outcomes 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 Associate Web Designer and the student will be able to:

- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.41, 20.42, 20.43.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.02, 41.03, 41.04, 41.05, 41.09, 41.10, 41.11, 41.16.]
- 42.0 Demonstrate proficiency using operating systems. [Student Performance Standards: 42.10, 42.11, 42.12, 43.13.]
- 50.0 Perform decision making activities. [Student Performance Standards: 50.01, 50.02, 50.03, 50.04, 50.07.]
- 55.0 Demonstrate proficiency navigating the Internet, Intranet, and the WWW. [Student Performance Standards: 55.01, 55.02, 55.03, 55.04, 55.05, 55.06, 55.07, 55.08, 55.09, 55.10, 55.11, 55.12, 55.13, 55.14, 55.18.]
- 56.0 Demonstrate proficiency using HTML commands. [Student Performance Standards: 56.01, 56.02, 56.03, 56.04, 56.05, 56.06, 56.07, 56.08, 56.09, 56.20, 56.21, 56.22.]
- 57.1 Demonstrate proficiency in page design applicable to the WWW. [Student Performance Standards: 57.01, 57.02, 57.03, 57.04, 57.05, 57.06, 57.07, 57.08, 57.09, 57.10, 57.11, 57.12, 57.13, 57,14, 57.15, 57.16, 57,17, 57.18, 57.19, 57.20, 57.21, 57.22, 57.23, 57.24, 57.28.]

58.0 Develop an awareness of Internet/Intranet tools. [Student Performance Standards: 58.01, 58,02, 58.03, 58.04, 58.07, 58.08.]

#### OCCUPATIONAL COMPLETION POINT - DATA CODE C

WEB GRAPHIC DESIGNER - (Industry Title)

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

- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.41, 20.42, 20.43.].
- 50.0 Perform decision making activities. [Student Performance Standards: 50.08, 50.10.]
- 51.0 Perform layout, design, and measurement activities. [Student Performance Standards: 51.03, 51.05, 51.06, 51.07.]
- 52.0 Demonstrate Proficiency in graphic editing operations. [Student Performance Standards: 52.02, 52.03, 52.04, 52.11, 52.12, 52.18, 52.19.]
- 53.0 Demonstrate proficiency in digital imaging. [Student Performance Standards: 53.01, 53.02, 53.03, 53.04,
- 56.0 Demonstrate proficiency using HTML commands. [Student Performance Standards: 56.15, 56.16, 56.21.]
- 60.0 Demonstrate proficiency using interactive Web site components. [Student Performance Standards: 60.01, 60.02, 60.03, 60.06, 60.08, 60.09, 60.11, 60.12.]
- 62.0 Demonstrate proficiency in server configuration standards.

# OCCUPATIONAL COMPLETION POINT - DATA CODE D

WEB Producer - (Industry Title)

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 Web Master and the student will be able to:

- 50.0 Perform decision making activities. [Student Performance Standards: 50.11, 50.10.]
- 58.0 Develop an awareness of Internet/Intranet tools. [Student Performance Standards: 58.05, 58.06.]
- 59.0 Demonstrate proficiency in web site promotion. [Student Performance Standards: 59.01, 59.02, 59.03, 59.04, 59.05, 59.06, 59.07, 59.08, 59.09, 59.10, 59.11.]
- 60.0 Demonstrate proficiency using interactive Web site components. [Student Performance Standards: 60.07, 60.13.]
- 61.0 Demonstrate proficiency using a scripting language. [Student Performance Standards: 61.01., 61.02, 61.03, 61.04, 61.05, 61.06, 61.07, 61.08
- 73.0 Students will demonstrate concepts necessary for e-commerce. [Student Performance Standards: 73.01, 73.02, 73.03, 73.04, 73.05.]
- 74.0 Demonstrate proficiency in page design applications. [Student Performance Standards: 74.01, 74.02, 74.03.]
- 75.0 Participate in group based business web project. [Student Performance Standards: 75.01, 75.02, 75.03, 75.04, 75.05, 75.06, 75.07, 75.08, 75.09.]

July 2001

# Florida Department of Education STUDENT PERFORMANCE STANDARDS

Program Title:Web/Internet/Intranet Services (Web Design Services)Secondary Number:8207500Postsecondary Number:B070500

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

# INFORMATION SYSTEMS

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

## WORKPLACE COMMUNICATIONS

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

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

# MANAGEMENT

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

#### CURRENT TRENDS/ISSUES IN THE WORKPLACE

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

## MANAGEMENT

- 06.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
  - 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
  - 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.

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

#### COMPUTATION AND FINANCE

- 07.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE AND TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
  - 07.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures. MA.E.1.4.1, MA.E.A.4.2
  - 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time). MA.B.3.4.1
  - 07.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate. MA.A.3.4.3

## JOB READINESS AND CAREER DEVELOPMENT

- 08.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE <u>GOALS</u>—The student will be able to:
  - 08.01 Assess, analyze and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
  - 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
  - 08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.
- 09.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS. EXPERIENCE WORK-BASED LEARNING THROUGH JOB SHADOWING, MENTORING, E-COACHING, ETC. -The student will be able to:
  - 09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
  - 09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
  - 09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow up). LA.C.3.4.4
  - 09.04 Design, initiate, refine, and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
  - 09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
  - 09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
  - 09.08 Experience work-based learning through volunteerism, job shadowing, mentoring, e-coaching, etc.

## HUMAN RELATIONS/INTERPERSONAL SKILLS

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

#### ADMINISTRATIVE OFFICE PROCEDURES

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

## OCCUPATIONAL COMPLETION POINT DATA CODE B

HTML CODER - INDUSTRY TITLE

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

#### WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>—The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services 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 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.
  - 41.10 Define the standards used by Internet/Intranet e-mail (e.g., pop, mime).
  - 41.11 Describe the issues involved in sending and receiving documents as e-mail attachments.
  - 41.16 Identify privacy issues in the employee/employer relationship. (e.g., avoid libel, spam, personal usage).
- 42.0 <u>DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS</u>—The student will be able to:

- 42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 42.11 Describe the difference between relative and absolute path commands.
- 42.12 Demonstrate a working knowledge of standard file formats.
- 42.13 Demonstrate proficiency with help references.

#### WEB DESIGN

- 50.0 PERFORM DECISION MAKING ACTIVITIES-The student will be able to:
  - 50.01 Determine work priorities.
  - 50.02 Evaluate and select appropriate software packages to complete assigned tasks.
  - 50.03 Evaluate information to be used and choose relevant material.
  - 50.04 Determine the audience.
  - 50.07 Compare are select appropriate multimedia tools.
- 55.0 <u>DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW</u>-The student will be able to:
  - 55.01 Identify and describe Web terminology.
  - 55.02 Describe the history of the Internet and Intranet.
  - 55.04 Describe the difference between a client and a server.
  - 55.05 Describe the difference between the Internet, Intranet, and WWW.
  - 55.06 Describe the different methods by which information may be accessed on the Internet/Intranet (e.g., browser, FTP, gopher, telnet, veronica).
  - 55.07 List the available resources and services on the Internet (e.g., electronic commerce, personal, government, business, etiquette, education, distance learning).
  - 55.08 Locate information on the Internet/Intranet using a Web browser.
  - 55.09 Copy information from the Internet/Intranet, save, and print using a Web browser.
  - 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).
  - 55.12 Identify and use search engines to locate information.
  - 55.13 Describe the various ways of communicating on the Internet/Intranet (e.g., e-mail, forums, IRC, CHAT, Listserv, Usenet, MOOs, etc.).
  - 55.14 Describe and observe Internet/Intranet ethics and copyright laws.
  - 55.18 Identify methods to protect personal copyright.
- 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 a Web page using basic HTML tags (e.g., links, lists, character styles, text alignment, tables).
  - 56.06 Use storyboarding techniques for subsequent Web pages (e.g., linear, hierarchical).
  - 56.07 Add graphics to Web pages.
  - 56.08 Edit and test HTML documents for accuracy and validity.
  - 56.09 Use basic functions of HTML editors and converters.

- 56.10 Use advanced storyboarding and organization for Web site design.
- 56.11 Develop, integrate, and apply the use of frames in Web site design (e.g., simple and complex framesets).
- 56.12 Develop, integrate, and apply the use of client-side imagemaps in Web site design.
- 56.13 Develop, integrate, and apply the use of forms in Web site design. 56.14 Develop, integrate, and apply HTML codes for search engines (e.g.,
  - META tags).
- 56.15 Use advanced functions of HTML editors and converters.
- 56.16 Explore and integrate new HTML tags as they are developed.
- 56.20 Use basic functions of WYSIWYG editors.
- 56.21 Compare and contrast WYSIWYG editors.
- 56.22 Compare and contrast HTML editors.

# 57.0 <u>DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICABLE TO THE WWW</u>-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).
- 57.03 Identify and convert graphic formats.
- 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.
- 57.06 Embed audio files into Web page designs.
- 57.07 Embed video files into Web page designs.
- 57.08 Embed animation files into Web page designs.
- 57.09 Use a team approach for Web project design.
- 57.10 Identify design strategies to reach and keep your audience.
- 57.11 Determine the objectives and the audience of Web sites.
- 57.12 Create storyboards of Web sites.
- 57.13 Create maps of index pages.
- 57.14 Use style sheets for consistent Web site design.
- 57.15 Create images for Web sites using digital imaging software.
- 57.16 Edit images using appropriate software.
- 57.17 Identify and create low-bandwidth graphic file types (e.g., transparent images, filters).
- 57.18 Create buttons for Web sites.
- 57.19 Format text for Web sites (e.g., font families, sizes).
- 57.20 Format online images for Web sites.
- 57.21 Create links to external images.
- 57.22 Optimize page size for effective downloading to browsers.
- 57.23 Build Web sites for publication using conventional file name structures.
- 57.24 Edit and test Web sites for accuracy and validity.
- 57.28 Compare and contrast appropriate design elements of verious industries.

# 58.0 <u>DEVELOP AN AWARENESS OF INTERNET/INTRANET TOOLS</u>-The student will be able to:

58.01 Describe the various hardware components used on the Internet/Intranet.
58.02 Demonstrate the use of various software components used on the Internet/Intranet (e.g., browser software with plug-ins).
58.03 Configure a browser for use with a plug-in.
58.04 Summarize the features of various plug-ins.

- 58.07 Demonstrate the use of compression programs.
- 58.08 Demonstrate the use of backups.

#### OCCUPATIONAL COMPLETION POINT DATA CODE - C WEB GRAPHIC DESIGNER - INDUSTRY TITLE

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

#### WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>—The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services environment.
- 50.0 PERFORM DECISION MAKING ACTIVITIES-The student will be able to:

50.08 Present and defend design projects. 50.10 Determine project specifications.

51.0 PERFORM LAYOUT, DESIGN AND MEASUREMENT ACTIVITIES-The student will be able to:

51.03 Prepare rough layout designs.51.05 Identify elements of design.51.06 Utilize and formulate advanced storyboarding techniques.51.07 Utilize navigational efficiency in the creation of Web sites.

52.0 <u>DEMONSTRATE PROFICIENCY IN GRAPHIC EDITING OPERATIONS</u>-The student will be able to:

52.02 Produce designs integrating all elements of design.
52.03 Complete projects using a variety of fonts, sizes, leading, and alignments.
5.04 Produce electronic illustrations using graphic editing software.
52.11 Produce documents integrating all elements of design using balance and continuity.
52.12 Produce projects using illustrations.
52.18 Produce projects using white space.
52.19 Design logos using type.

53.0 DEMONSTRATE PROFICIENCY IN DIGITAL IMAGING-The student will be able to:

53.01 Demonstrate advance usage of a scanner/slide scanner.53.02 Crop and scale photographs and line art electronically.53.03 Demonstrate an understanding of formats and modes.53.04 Demonstrate use of image editing software.

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

56.15 Use advanced functions of HTML editors and converters. 56.17 Explore and integrate new HTML tages as they are developed. 56.21 Use advanced functions of WYSIWYG editors.

60.0 <u>DEMONSTRATE PROFICIENCY USING INTERACTIVE WEB SITE COMPONENTS</u>-The student will be able to:

60.01 Discuss the components of multimedia applicable to the WWW.

60.02 Discuss the technical requirements necessary to view multimedia Web sites.
60.03 Identify and incorporate interactive elements on Web pages.
60.04 Create and edit video files for Web sites.
60.05 Create and edit audio files for Web sites.
60.06 Identify animation technologies.
60.07 Create animations using current tools.
60.08 Demonstrate the components of online conferencing.
60.09 Demonstrate the components of enhanced HTML (e.g., Dynamic HTML).
60.10 Demonstrate an understanding of the components of virtual reality and VRML (e.g., 3-D worlds).
60.11 Create embed, and demonstrate multimedia components using various tools (e.g., Quicktime, Shockwave, ScreenCam, ActiveX, PDF).
60.11 Edit and test enhancements for accuracy and validity.

#### 62.0 DEMONSTRATE PROFICIENCY IN SERVER CONFIGURATION STANDARDS.

# OCCUPATIONAL COMPLETION POINT DATA CODE D

WEB PRODUCER - INDUSTRY TITLE

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

# WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>-The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services environment.
- 50.0 PERFORM DECISION MAKING ACTIVITIES-The student will be able to:

50.10 Determine advanced project specifications.

50.11 Present and defend advanced design projects.

# WEB DESIGN

58.0 <u>DEVELOP AN AWARENESS OF INTERNET/INTRANET TOOLS</u>—The student will be able to:

58.05 Demonstrate file transfer protocol (e.g., uploading, downloading). 58.06 Identify and use techniques/software for multiple page downloading (e.g., Whacking).

- 59.0 <u>DEMONSTRATE PROFICIENCY IN WEB SITE PROMOTION</u>—The student will be able to:
  - 59.01 Create a marketing strategy for the Web site.
  - 59.02 Create a business plan for the Web site.
  - 59.03 Describe costing and proposal writing.
  - 59.04 Identify, compare, and select Internet services required for publishing site.
  - 59.05 Describe ways in which organizations can use Internet/Intranet technology to reduce costs, improve communications, and market products or images.
  - 59.06 Demonstrate the use of offline promotion.
  - 59.07 List different models for creating an organizational presence on the Web.

- 59.08 Describe site registration procedures.
- 59.09 Create an evaluation plan to measure the effectiveness of the Web site (e.g., page counters, logs, search engines, asking visitors how they found your site).
- 59.10 Develop an awareness of online resources for doing business on the Internet/Intranet.
- 59.11 Demonstrate site registration with major search engines and Web directories.
- 60.0 <u>DEMONSTRATE PROFICIENCY USING INTERACTIVE WEB SITE COMPONENTS</u>-The student will be able to:

60.07 Create animations using current tools. 60.13 Demonstrate professional communication skills with clients (e.g., in the conception, creation, and implementation of the Web site.)

- 61.0 <u>DEMONSTRATE PROFICIENCY USING A SCRIPTING LANGUAGE</u>—The student will be able to:
  - 61.01 List common scripting languages.
    61.02 Compare features of different scripting languages.
    61.03 Analyze scripts developed by others.
    61.04 Modify existing scripts.
    61.05 Create and embed scripts for Web page enhancement.
    61.06 Create scripts to transfer data from a form.
    61.07 Edit and test scripts for accuracy and validity.
    61.08 Create searchable indexes.
- 73.0 DEMONSTRATE CONCEPTS NECESSARY FOR E-COMMERCE-Students will be able to:
  - 73.01 Define e-commerce.
    73.02 Discuss security issues.
    73.03 Compare existing e-commerce sites.
    73.04 Discuss components of a successful Web presence.
    73.05 Contact e-commerce providers to determine current standards (e.g., Visa, MC, AmEx, banks).
- 74.0 <u>DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICATIONS-</u>The student will be able to:

74.01 Create embedded video files for Web page designs. 74.02 create embedded audio files for Web page designs. 74.03 Create embedded animation files for Web page designs. (e.g., Flash)

75.0 PARTICIPATE IN GROUP BASED BUSINESS WEB PROJECT-The student will be able to:

75.01 Formulate a design team for a web site project
75.02 Determine individual and group responsibilities.
75.03 Create a Web site for a business as an individual.
75.04 Create a Web site as a team for a business.
75.05 Determine design issues.
75.06 Coordinate story boards into the overall design.
75.07 Assign management responsibilities necessary for project completion.
75.08 Determine schedules and deadlines.
75.09 Review, edit, and implement the project.

July 2001

# Florida Department of Education

#### STUDENT PERFORMANCE STANDARDS

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

#### COURSE DESCRIPTION:

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

#### INFORMATION SYSTEMS

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

#### WORKPLACE COMMUNICATIONS

- 02.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL <u>READING, WRITING, SPEAKING, LISTENING, AND VIEWING</u>—The student will be able to:
  - 02.01 Select and use appropriate modes of communication for specific job and work situations. LA.B.2.4.4

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

#### MANAGEMENT

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

# CURRENT TRENDS/ISSUES IN THE WORKPLACE

- 05.0 PRACTICE QUALITY PERFORMANCE IN THE LEARNING ENVIRONMENT AND THE WORKPLACE-The student will be able to:
  - 05.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).

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

#### MANAGEMENT

- 06.0 INCORPORATE APPROPRIATE LEADERSHIP AND SUPERVISION TECHNIQUES, CUSTOMER SERVICE STRATEGIES, AND STANDARDS OF PERSONAL ETHICS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—The student will be able to:
  - 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective servicebased culture in the workplace, business, or learning environment.
  - 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
  - 06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

#### COMPUTATION AND FINANCE

- 07.0 APPLY MATHEMATICAL OPERATIONS AND PROCESSES AS WELL AS FINANCIAL PLANNING STRATEGIES TO COMMONLY OCCURRING SITUATIONS IN THE WORKPLACE AND TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE-The student will be able to:
  - 07.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures. MA.E.1.4.1, MA.E.A.4.2
  - 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time). MA.B.3.4.1
  - 07.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate. MA.A.3.4.3

# JOB READINESS AND CAREER DEVELOPMENT

- 08.0 ASSESS PERSONAL STRENGTHS AND WEAKNESSES AS THEY RELATE TO JOB OBJECTIVES, CAREER EXPLORATION, PERSONAL DEVELOPMENT, AND LIFE GOALS-The student will be able to:
  - 08.01 Assess, analyze and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
  - 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
  - 08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.
- 10.0 INCORPORATE KNOWLEDGE GAINED FROM INDIVIDUAL ASSESSMENT AND JOB/CAREER EXPLORATION TO DESIGN AN INDIVIDUAL CAREER PLAN THAT REFLECTS THE TRANSITION FROM SCHOOL TO WORK, LIFELONG LEARNING, AND PERSONAL AND PROFESSIONAL GOALS. EXPERIENCE WORK-BASED LEARNING THROUGH JOB SHADOWING, MENTORING, E-COACHING, ETC. -The student will be able to:
  - 09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.

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

#### HUMAN RELATIONS/INTERPERSONAL SKILLS

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

## ADMINISTRATIVE OFFICE PROCEDURES

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

Secondary Course Number:8207110Course Title:Web Design 1Course Credit:1

## COURSE DESCRIPTION:

This course is designed to provide a basic overview of the Internet, Intranet, and WWW. The content includes operating systems; basic HTML commands; navigation of the Internet, Intranet, and Web; and Web page design. After successful completion of this course and Web Design 2, students will have met Occupational Completion Point - Data Code B, HTML Coder - (Industry Title).

## WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>—The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services 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 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.
  - 41.10 Define the standards used by Internet/Intranet e-mail (e.g., pop3, mime).
  - 41.11 Describe the issues involved in sending and receiving documents as e-mail attachments.
  - 41.16 Identify privacy issues in the employee/employer relationship (e.g., avoid libel, spam, personal usage).
- 42.0 <u>DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS</u>—The student will be able to:
  - 42.10 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
  - 42.11 Describe the difference between relative and absolute path commands.
  - 42.12 Demonstrate a working knowledge of standard file formats.
  - 42.13 Demonstrate proficiency with help references.

#### WEB DESIGN

50.0 PERFORM DECISION MAKING ACTIVITIES-The student will be able to:

50.01 Determine work priorities.

- 50.02 Evaluate and select appropriate software packages to complete assigned tasks.
- 50.03 Evaluate information to be used and choose relevant material.
- 50.04 Determine the audience.
- 50.07 Compare are select appropriate multimedia tools.
- 55.0 <u>DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW</u>-The student will be able to:
  - 55.01 Identify and describe Web terminology.
  - 55.02 Describe the history of the Internet and Intranet.
  - 55.04 Describe the difference between a client and a server.
  - 55.05 Describe the difference between the Internet, Intranet, and WWW.
  - 55.06 Describe the different methods by which information may be accessed on the Internet/Intranet (e.g., browser, FTP, gopher, telnet, veronica).
  - 55.07 List the available resources and services on the Internet (e.g., electronic commerce, personal, government, business, etiquette, education, distance learning).
  - 55.08 Locate information on the Internet/Intranet using a Web browser.
  - 55.09 Copy information from the Internet/Intranet, save, and print using a Web browser.
  - 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).
  - 55.12 Identify and use search engines to locate information.
  - 55.13 Describe the various ways of communicating on the Internet/Intranet (e.g., e-mail, forums, IRC, CHAT, Listserv, Usenet, MOOs, etc.).
  - 55.14 Describe and observe Internet/Intranet ethics and copyright laws.
  - 55.18 Identify methods to protect personal copyright.
- 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 a Web page using basic HTML tags (e.g., links, lists, character styles, text alignment, tables).
  - 56.06 Use storyboarding techniques for subsequent Web pages (e.g., linear, hierarchical).
  - 56.07 Add graphics to Web pages.
  - 56.08 Edit and test HTML documents for accuracy and validity.
  - 56.09 Use basic functions of HTML editors and converters.
  - 56.20 Use basic functions of WYSIWYG editors.
- 57.0 <u>DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICABLE TO THE WWW</u>-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).
  - 57.03 Identify and convert graphic formats.
  - 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.

- 58.0 DEVELOP AN AWARENESS OF INTERNET/INTRANET TOOLS-The student will be able to:
  - 58.01 Describe the various hardware components used on the
    - Internet/Intranet.
  - 58.07 Demonstrate the use of compression programs. 58.08 Demonstrate the use of backups.

Secondary Course Number:8207120Course Title:Web Design 2Course Credit:1

## COURSE DESCRIPTION:

This course provides advanced concepts for Internet, Intranet, and Web design. The content includes Internet/Intranet tools, Web site promotion, advanced HTML commands, advanced page design, and multimedia applications. After successful completion of this course, students will have met Occupational Completion Point - Data Code B, HTML Coder - (Industry Title).

## WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>—The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services environment.

#### WEB DESIGN

- 56.0 DEMONSTRATE PROFICIENCY USING HTML COMMANDS-The student will be able to:
  - 56.10 Use advanced storyboarding and organization for Web site design.
  - 56.11 Develop, integrate, and apply the use of frames in Web site design (e.g., simple and complex framesets).
  - 56.12 Develop, integrate, and apply the use of client-side imagemaps in Web site design.
  - 56.13 Develop, integrate, and apply the use of forms in Web site design.
  - 56.14 Develop, integrate, and apply HTML codes for search engines (e.g., META tags).
  - 56.15 Use advanced functions of HTML editors and converters.
  - 56.16 Explore and integrate new HTML tags as they are developed.
  - 56.21 Compare and contrast WYSIWYG editors.
  - 56.22 Compare and contrast HTML editors.

# 57.0 <u>DEMONSTRATE PROFICIENCY IN PAGE DESIGN APPLICABLE TO THE WWW</u>—The student will be able to:

57.06 Embed video files into Web page designs.
57.07 Embed audio files into Web page designs
57.08 Embed animation files into Web page designs.
57.09 Use a team approach for Web project design.
57.10 Identify design strategies to reach and keep your audience.
57.11 Determine the objectives and the audience of Web sites.
57.12 Create storyboards of Web sites.
57.13 Create maps of index pages.
57.14 Use style sheets for consistent Web site design.
57.15 Create images for Web sites using digital imaging software.
57.16 Edit images using appropriate software.

- 57.17 Identify and create low-bandwidth graphic file types (e.g., transparent images, filters).
- 57.18 Create buttons for Web sites.
- 57.19 Format text for Web sites (e.g., font families, sizes).
- 57.20 Format online images for Web sites.
- 57.21 Create links to external images.
- 57.22 Optimize page size for effective downloading to browsers.
- 57.23 Build Web sites for publication using conventional file name structures.
- 57.24 Edit and test Web sites for accuracy and validity.
- 57.28 Compare and contrast appropriate design elements of various industries.
- 58.0 <u>DEVELOP AN AWARENESS OF INTERNET/INTRANET TOOLS</u>-The student will be able to:
  - 58.02 Demonstrate the use of various software components used on the Internet (e.g., browser software with plug-ins).
  - 58.03 Configure a browser for use with a plug-in.
  - 58.04 Summarize the features of various plug-ins.

Secondary Course Number:	8207130
Course Title:	Web Design 3
Course Credit:	1

## COURSE DESCRIPTION:

This course provides advanced concepts in HTML, design, and internet tools. After successful completion of Web Design 3 and 4, students will have met Occupational Completion Point - Data Code C, Web Graphic Designer - (Industry Title).

#### WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>-The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services environment.

#### WEB DESIGN

50.0 PERFORM DECISION MAKING ACTIVITIES-The student will be able to:

50.08 Present and defend design projects. 50.10 Determine project specifications.

51.0 <u>PERFORM LAYOUT, DESIGN AND MEASUREMENT ACTIVITIES</u>-The student will be able to:

51.03 Prepare rough layout designs.51.05 Identify elements of design.51.06 Utilize and formulate advanced storyboarding techniques.51.07 Utilize navigational efficiency in the creation of Web sites.

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

56.15 Use advanced functions of HTML editors and converters. 56.18 Explore and integrate new HTML tages as they are developed. 56.21 Use advanced functions of WYSIWYG editors.

60.0 <u>DEMONSTRATE PROFICIENCY USING INTERACTIVE WEB SITE COMPONENTS</u>-The student will be able to:

60.01 Discuss the components of multimedia applicable to the WWW.
60.02 Discuss the technical requirements necessary to view multimedia Web sites.
60.03 Identify and incorporate interactive elements on Web pages.
60.06 Identify animation technologies.
60.08 Demonstrate the components of online conferencing.

60.09 Demonstrate the components of enhanced HTML (e.g., Dynamic HTML).

60.11 Create embed, and demonstrate multimedia components using various tools (e.g., Quicktime, Shockwave, ScreenCam, ActiveX, PDF).

60.12 Edit and test enhancements for accuracy and validity.

Secondary Course Number:	8207140
Course Title:	Web Design 4
Course Credit:	1

#### COURSE DESCRIPTION:

This course provides advanced concepts in web site promotion, interactive web site development, and using scripting languages as they relate to WWW site. After successful completion of Web Design 3 and 4, students will have met Occupational Completion Point - Data Code C, Web Graphic Designer - (Industry Title).

## WORK-BASED LEARNING

- 20.0 <u>PARTICIPATE IN WORK-BASED LEARNING EXPERIENCES</u>—The student will be able to:
  - 20.41 Participate in work-based learning experiences in a Web/Internet/Intranet services environment.
  - 20.42 Discuss the use of technology in a Web/Internet/Intranet services environment.
  - 20.43 Compare and contrast the software applications used in a Web/Internet/Intranet services environment.
- 52.0 <u>DEMONSTRATE PROFICIENCY IN GRAPHIC EDITING OPERATIONS</u>-The student will be able to:
  - 52.02 Produce designs integrating all elements of design.
  - 52.03 Complete projects using a variety of fonts, sizes, leading, and alignments.
  - 5.04 Produce electronic illustrations using graphic editing software.
  - 52.11 Produce documents integrating all elements of design using balance and continuity.
  - 52.12 Produce projects using illustrations.
  - 52.18 Produce projects using white space.
  - 52.19 Design logos using type.
- 53.0 DEMONSTRATE PROFICIENCY IN DIGITAL IMAGING-The student will be able to:
  - 53.01 Demonstrate advance usage of a scanner/slide scanner.
  - 53.02 Crop and scale photographs and line art electronically.
  - 53.03 Demonstrate an understanding of formats and modes.
  - 53.04 Demonstrate use of image editing software.
  - 53.05 Demonstrate advanced usage of digital imaging (e.g., digital camera, photo disk).
- 60.0 <u>DEMONSTRATE PROFICIENCY USING INTERACTIVE WEB SITE COMPONENTS</u>-The student will be able to:
  - 60.12 Edit and test enhancements for accuracy and validity.
- 62.0 DEMONSTRATE PROFICIENCY IN SERVER CONFIGURATION STANDARDS

Secondary Course Number:8207150Course Title:Web Design 5Course Credit:1

#### COURSE DESCRIPTION:

This course is designed to present an overview of e-commerce, introduce scripting and increase proficiency in audiovisual techniques. With the completion of this course the student will move to Web Design 6.

#### WEB DESIGN

50.0 Perform decision making activities:

50.11 Present and defend advanced design projects 50.10 Determine advanced project specifications.

- 58.0 Develop and awareness of internet/intranet tools:
  - 58.03 Demonstrate file transfer protocol 58.04 Identify and use techniques/software for multiple page downloading.
- 59.0 Demonstrate proficiency in web site promotion- The student will be able to:
  - 59.01 Create a marketing strategy for the Web site.
  - 59.02 Create a business plan for the Web site including research on competitive URL's
  - 59.03 Describe costing and proposal writing.
  - 59.04 Identify, compare and select Internet services requited for publishing site.
- 60.0 Demonstrate Proficiency using interactive Web site components.

60.07 Create animations using current tools 60.13 Demonstrate professional communication skills with clients (e.g. in the conception, creation and implementation of the web site.)

61.0 <u>DEMONSTRATE PROFICIENCY USING A SCRIPTING LANGUAGE</u>-The student will be able to:

61.01 List common scripting languages.
61.02 Compare features of different scripting languages.
61.03 Analyze scripts developed by others.
61.04 Modify existing scripts.
61.05 Create and embed scripts for Web page enhancement.
61.06 Create scripts to transfer data from a form to a database.
61.07 Edit and test scripts for accuracy and validity.
61.08 Create searchable indexes.

73.0 Students will demonstrate concepts necessary for e-commerce

73.01 Define e-commerce
73.02 Discuss security issues

- 73.03 Compare existing e-commerce sites
- 73.04 Discuss components of a successful web presence
- 73.05 Contact e- commerce providers to determine current standards (e.g., Visa, MC, AmEx, banks).
- 74.0 Demonstrate proficiency in page design applications.
  - 57.24 Create embedded video files for Web page designs.

  - 57.25 Create embedded audio files for Web page designs. 57.26 Create embedded animation files for Web page designs. (e.g., Flash).

Secondary Course Number:8207160Course Title:Web Design 6Course Credit:1

COURSE DESCRIPTION:

With the completion of this course the student will be able to plan, design, implement and promote a business web site using both individual and team talents. Students will demonstrate proficiency with industry standard software.

With the completion of this course the student will complete OCP D, WEB  $\ensuremath{\mathsf{PRODUCER}}$ 

# 59.0 <u>DEMONSTRATE PROFICIENCY IN WEB SITE PROMOTION</u>-The student will be able to:

- 59.05 Describe ways in which organizations can use Internet/Intranet technology to reduce costs, improve communications, and market products or images.
- 59.06 Demonstrate the use of offline promotion.
- 59.07 List different models for creating an organizational presence on the Web.
- 59.08 Describe site registration procedures.
- 59.09 Create an evaluation plan to measure the effectiveness of the Web site (e.g., page counters, logs, search engines, asking visitors how they found your site)
- 59.10 Develop an awareness of online resources for doing business on the Internet/Intranet.
- 59.11 Demonstrate site registration with major search engines and Web directories
- 75.0 Participate in group based business web project.
  - 75.01 Formulate a design team for a web site project
  - 75.02 Determine individual and group responsibilities.
  - 75.03 Create a web site for a business as an individual.
  - 75.04 Create a web site as a team for a business.
  - 75.05 Determine design issues
  - 75.06 Coordinate story boards into the overall design.
  - 75.07 Assign management responsibilities necessary for project completion.
  - 75.08 Determine schedules and deadlines.
  - 75.09 Review edit and implement the project.