

Florida Department of Education

CURRICULUM FRAMEWORK

Program Title: Multimedia Design Technology
Program Type: Job Preparatory
Occupational Area: Business Technology Education
Components: Prerequisite: None

	Secondary		PSAV
Program Number:	8212400		B070200
CIP Number:	0510019900		
Grade Level	9-12		Grade Level 30,31
Standard Length	4 credits		1350 hours
Certification:	BUS ED @4 1 @2		BUS ED @4 1 @2 BUS
	VOE @7		ED
	TEACH CBE @7		VOE @7
	BUS DP @7 G		TEACH CBE @7
	ELECT DP @7 G		BUS DP @7 G
	CLERICAL @7 G		ELECT DP @7 G
	SECRETAR @7 G		CLERICAL @7 G
	STENO G @4 @7		SECRETAR @7 G
	TEC ELEC @7 @G		STENO G @4 @7 G
			TEC ELEC \$7 @G
OCP B, C, and D Only	COMP SCI @6 @2		COMP SCI @6 @2
Additional	I ART-TEC 1 @2		COMM ART @7 G
certification	COMM ART @7 G		TV PRO TEC @7 G
accepted	TV PRO TEC @7 G		
VSO	FBLA		Phi Beta Lambda
	BPA		Business
			Professionals of
			America
Coop Method	Yes		Yes
Apprenticeship	No		No
Facility Code	212		212
Basic Skills:			
Math	10		10
Language	10		10
Reading	10		10

- I. **PURPOSE:** This program is designed to prepare students for employment as a Multimedia Production Assistant, Multimedia Jr. Designer, Multimedia Designer, Multimedia Producer, and Multimedia Specialist.

This program offers a broad foundation of knowledge and skills to prepare students for employment in digital media, new media, and multimedia positions. The content includes practical experiences in Web page design, interactive presentation development, testing and production. Specialized skills in multimedia presentations such as video editing, audio features, and simple animation and authoring software are used to produce a variety of interactive multimedia presentations.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following rudiments of the digital media/multimedia industry: presentation planning, elements of presentation design, storyboarding, integration of video, graphics, animation, and audio elements into new media projects/presentations, and collaboration/teamwork.

II. **PROGRAM STRUCTURE:** This program is a planned sequence of instruction. Prior knowledge of vector and raster graphics and basic file management, keyboarding, and general office production software is useful. There are 5 occupational completion points in the program. 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 Multimedia program structure:

Computer Technology Cluster

Postsecondary Adult Vocational

OCP E	Multimedia Specialist	Industry Title SOC Code 27-1014 1350 hours
OCP D	Multimedia Producer	Industry Title SOC Code 27-1014 1250 hours
OCP C	Multimedia Designer	Industry Title SOC Code 27-1014 1050 hours
OCP B	Multimedia Jr. Designer	Industry Title SOC Code 27-2012.01 750 hours <hr/> Secondary: Web Design 1, Multimedia Foundations 2, Multimedia Foundations 3
OCP A	Multimedia Production Assistant	Industry Title SOC Code 27-2012.01 300 hours <hr/> Secondary: CCC or Intro to IT, Multimedia Foundations 1
Prerequisite: None		

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

8209020 Computing for College and Careers (OR)
8297310 Introduction to Information Technology
8212430 Multimedia Foundations 1
8207110 Web Design 1
8212440 Multimedia Foundations 2
8212450 Multimedia Foundations 3

- III. **LABORATORY ACTIVITIES:** Laboratory activities are an integral part of this program and include the use of keyboarding systems; computer systems; and digital equipment for storage, scanning, retrieval, presentation, CD recording, video, and printing purposes.

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

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

In accordance with Rule 6A-10.040, FAC., the minimum basic skills grade levels required for postsecondary adult vocational students is: Mathematics 10.0, Language 10.0, Reading 10.0. 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 1350 hours.

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

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

systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

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

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

- IV. **INTENDED OUTCOMES**: After completing the following competencies, the student will have achieved the occupational completion point of Multimedia Production Assistant and the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A

MULTIMEDIA PRODUCTION ASSISTANT - Industry Title SOC Code 27-2012.01

Secondary:

Computing for College and Careers competencies:

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance *and enhance personal performance in relation to the workplace*. 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 Demonstrate comprehension and communication skills. [Student Performance Standards: 02.01, 02.02, 02.04, 02.05, 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, 03.03, 03.05, 03.06.]
- 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member. [Student Performance Standards: 04.01, 04.02, 04.03.]
- 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 05.01, 05.02.]
- 06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal and professional ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 06.01, 06.02, 06.03.]
- 07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 07.01, 07.02, 07.03.]
- 08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. [Student Performance Standards: 08.01, 08.02, 08.03.]
- 09.0 Incorporate knowledge gained from individual assessment and

- job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. [Student Performance Standards: 09.01,09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08.]
- 10.0 Demonstrate personal and interpersonal skills and attributes appropriate for the workplace. [Student Performance Standards: [10.01, 10.02, 10.03.]
- 13.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: ~~13.01~~, 13.02.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.09.]
- 42.0 Demonstrate operating systems. [Student Performance Standards: 42.01, 42.10, 42.12, 42.14.]
- 67.0 Develop an awareness of emerging technologies. [Student Performance Standards: 67.01, 67.02, 67.03.]

OR

Introduction to IT Competencies:

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 01.01, 01.02, 01.03, 01.04, 01.06, 01.07.]
- 02.0 Demonstrate Comprehension and communication skills. [Student Performance Standards: 02.03, 02.62. 02.63, 02.64, 02.65, 02.66.]
- 03.0 Use technology to enhance the effectiveness of communication skills. [Student Performance Standards: 03.03, 03.06.]
- 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. [Student Performance Standards: 04.01, 04.02, 04.03.]
- 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 05.01, 05.02, 07.07, 07.08.]
- 06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 06.03.]
- 07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 07.01, 07.02, 07.03.]
- 08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. [Student Performance Standards: 08.02, 08.03.]
- 09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. [Student Performance Standards: 09.15, 09.16, 09.17, 09.18, 09.19, 09.20.]
- 10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace. [Student Performance Standards: 10.01, 10.03.]
- 20.0 Participate in work-based learning experiences. [Student

- Performance Standards: 20.44, 20.46.]
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.02, 41.03, 41.04, 41.05, 41.06, 41.07, 41.08, 41.09, 41.10, 41.11, 41.12, 41.13.]
 - 42.0 Demonstrate knowledge of different operating systems. [Student Performance Standards: 42.01, 42.10, 42.12, 42.14,]
 - 55.0 Demonstrate proficiency navigating the internet, intranet, and the WWW. [Student Performance Standards: 55.01, 55.10, 55.11, 55.14, 55.15, 55.16, 55.17, 55.18.]
 - 56.0 Demonstrate proficiency using HTML commands. [Student Performance Standards: 56.01, 56.02, 56.03, 56.04, 56.05, 56.06, 56.08, 56.17, 56.18, 56.19.]
 - 57.0 Demonstrate proficiency in page design applicable to the WWW. [Student Performance Standards: 57.01, 57.02, 57.04, 57.05, 57.25, 57.26, 57.28.]
 - 63.0 Demonstrate proficiency using specialized web design software. [Student Performance Standards: 63.01, 63.02.]
 - 64.0 Develop an awareness of the information technology industry. [Student Performance Standards: 64.01, 64.04, 64.05.]
 - 65.0 Develop an awareness of microprocessors and digital computers. [Student Performance Standards: 65.01, 65.02, 65.03, 65.04, 65.05, 65.06, 65.07, 65.08.]
 - 66.0 Develop an awareness of programming languages. [Student Performance Standards: 66.01, 66.02, 66.03, 66.04.]
 - 67.0 Develop an awareness of emerging technologies. [Student Performance Standards: 67.01, 67.02, 67.03.]
 - 69.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model. [Student Performance Standards: 69.04, 69.06, 69.07, 69.08, 69.09, 69.11, 69.01, 69.02.]
 - 70.0 Demonstrate proficiency using common software applications. [Student Performance Standards: 70.01, 70.02.] 4)
 - 71.0 Demonstrate proficiency using specialized software applications. [Student Performance Standards: 71.01, 71.02, 71.06.]

PLUS:

- 200.0 Demonstrate knowledge of presentation production issues. Student Performance Standards: 200.01, 200.02, 200.03, 200.04, 200.05, 200.06, 200.07]
- 201.0 Demonstrate proficiency in using presentation software and equipment. [Student Performance Standards 201.02]
- 202.0 Demonstrate proficiency using software and equipment. [Student Performance Standards 202.01, 202.02, 202.03, 202.04, 202.05, 202.06, 202.07, 202.08]

Postsecondary:

- 200.0 Demonstrate knowledge of presentation production issues. [Student Performance Standards: 200.01, 200.02, 200.03, 200.04, 200.05, 200.06, 200.07]
- 201.0 Demonstrate proficiency in using presentation software and equipment. [Student Performance Standards 201.02]
- 202.0 Demonstrate proficiency using software and equipment [Student Performance Standards 202.01, 202.02, 202.03, 202.04, 202.05, 202.06, 202.07, 202.08]

OCCUPATIONAL COMPLETION POINT - DATA CODE B
MULTIMEDIA JR. DESIGNER - Industry Title SOC Code 27-2012.01

After completing the following competencies, the student will have achieved the occupational completion point of Multimedia Jr. Designer and the student will be able to:

Secondary:

- 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, 55.04, 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.]
- 57.0 Demonstrate proficiency in page design applicable to the WWW. [Student Performance Standards: 57.01, 57.02, 57.03, 57.04, 57.05.]
- 203.0 Demonstrate proficiency in Web page design applicable to the WWW. [Student Performance Standards 203.01, 203.02, 203.03, 203.04]
- 204.0 Demonstrate an understanding of HTML commands. [Student Performance Standards 204.01, 204.02, 204.03]
- 205.0 Demonstrate proficiency in using a WYSIWG editor, Web design, or Web animation for Web page design [Student Performance Standards 205.01, 205.02, 205.03, 205.04, 205.05, 205.06, 205.07, 205.08, 205.09, 205.10, 205.11, 205.12, 205.13, 205.14, 205.15, 205.16, 205.17, 205.18]

Postsecondary:

- 203.0 Demonstrate proficiency in Web page design applicable to the WWW. [Student Performance Standards 203.01, 203.02, 203.03, 203.04]
- 204.0 Demonstrate an understanding of HTML commands. [Student Performance Standards 204.01, 204.02, 204.03]
- 205.0 Demonstrate proficiency in using a WYSIWG editor, Web design, or Web animation for Web page design. [Student Performance Standards 205.01, 205.02, 205.03, 205.04, 205.05, 205.06, 205.07, 205.08, 205.09, 205.10, 205.11, 205.12, 205.13, 205.14, 205.15, 205.16, 205.17, 205.18]

*******THIS ENDS THE SECONDARY PORTION OF THE PROGRAM.*******

POSTSECONDARY ONLY:

**OCCUPATIONAL COMPLETION POINT - DATA CODE C
MULTIMEDIA DESIGNER - Industry Title SOC Code 27-1014**

After completing the following competencies, the student will have achieved the occupational completion point of Multimedia/New Media Designer and the student will be able to:

- 201.0 Demonstrate proficiency in using presentation software and equipment
[Student Performance Standards 201.03, 201.04, 201.05]
- 202.0 Demonstrate proficiency using video editing software and equipment [Student Performance Standards 202.09, 202.010, 202.11, 202.12]

OCCUPATIONAL COMPLETION POINT - DATA CODE D
MULTIMEDIA PRODUCER - Industry Title SOC Code 27-1014

After completing the following competencies, the student will have achieved the occupational completion point of Multimedia/New Media Producer and the student will be able to:

- 201.0 Demonstrate Proficiency in using presentation software and equipment [Student Performance Standard 201.06]
- 207.0 Develop proficiency in using authoring software. [Student Performance Standards 207.01, 207.02, 207.03, 207.04]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards 20.55]

OCCUPATIONAL COMPLETION POINT - DATA CODE E
MULTIMEDIA SPECIALIST - Industry Title SOC Code 27-1014

Intended outcomes of OCP A, OCP B, C and OCP D may be completed previously or concurrently. After completing the following additional competencies, the student will have achieved the occupational completion point of Multimedia Specialist and the student will be able to:

- 208.0 Apply job readiness, career planning and job seeking skills to obtain personal and professional goals. [Student Performance Standards 208.01, 208.02, 208.03]

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Secondary:

Computing for College and Careers competencies:

INFORMATION SYSTEMS

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

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 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 Demonstrate basic computer file management skills.
- 01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 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.
- 02.04 Prepare and deliver an oral report with appropriate materials to the class
- 02.05 Participate in large group discussions as a member and/or a leader.
- 02.06 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.07 Accurately follow written and oral instructions.
- 02.08 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.
- 03.02 Use the writing process to create and edit business documents appropriate to the subject matter, purpose, and audience.

- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
- 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.

- 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:

- 08.01 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, follow-up).
- 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.
- 10.02 Apply appropriate strategies to manage and resolve conflicts in work situations.
- 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

ADMINISTRATIVE PROCEDURES

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

- 13.02 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

NETWORK/SOFTWARE SUPPORT

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

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

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

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

INFORMATION TECHNOLOGY

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

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

OR

Introduction to Information Technology competencies:

INFORMATION SYSTEMS

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

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.

- 01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.

WORKPLACE COMMUNICATIONS

- 02.0 DEMONSTRATE COMPREHENSION AND COMMUNICATION SKILLS—The student will be able to:
 - 02.03 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
 - 02.61 Use professional business vocabulary appropriate for information technology environments.
 - 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, and 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. 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:
 - 05.03 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).

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

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

06.03 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:

07.04 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.

07.05 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).

07.06 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

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:
- 41.02 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 ROM's).
- 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.—
- 57.28 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 proficiency using 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:
- 69.04 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.
- 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.

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.

Plus:

200.0 DEMONSTRATE KNOWLEDGE OF PRESENTATION PRODUCTION ISSUES—The student will be able to:

- 200.01 Identify characteristics of various types of presentations (informing, selling, teaching, entertaining)
- 200.02 Identify presentation materials (e.g. handouts, seminar notebooks, business cards, coupons, etc.) and presentation marketing mediums (ex. print media such as newspaper, magazines; TV; movies; computer presentations; interactive CD ROM; kiosks, and Web pages, etc.)
- 200.03 Identify design characteristics (fonts, size and styles, backgrounds, etc.) that are suited for each type of presentation format and material.
- 200.04 Demonstrate knowledge of copyright laws including copyright statute, disclaimers, and filing procedures.
- 200.05 Research and identify skills needed for career positions in multimedia.
- 200.06 Demonstrate an understanding of graphic and other file formats (e.g., EPS, TIFF, JPEG, ASCII, MPEG, MIDI, AVI, WAV, etc.) and knowledge of image size when scanning and saving files for use in different presentation types (Web, computer, print, etc.)
- 200.07 Demonstrate knowledge of presentation vocabulary/terms.

201.0 DEMONSTRATE PROFICIENCY IN USING PRESENTATION SOFTWARE AND EQUIPMENT

- The student will be able to:

201.02 Produce a presentation that includes music, animation, and digital photography and present it using a projection system.

Postsecondary

Fundamentals of Multimedia

DESCRIPTION:

This OCP is designed to provide a basic understanding of fundamentals of multimedia. Students learn to plan and create presentations that incorporate scanned images, images created in various formats and mediums. After successful completion, students will have met Occupational Completion Point - Data Code A, Multimedia Production Assistant (Industry Title) SOC Code 27-2012.01

PRESENTATION PRODUCTION

200.0 DEMONSTRATE KNOWLEDGE OF PRESENTATION PRODUCTION ISSUES-The student will be able to:

- 200.01 Identify characteristics of various types of presentations (informing, selling, teaching, entertaining)
- 200.02 Identify presentation materials (e.g.. handouts, seminar notebooks, business cards, coupons, etc.) and presentation marketing mediums (ex. print media such as newspaper, magazines; TV; movies; computer presentations; interactive CD ROM; kiosks, and Web pages, etc.)
- 200.03 Identify design characteristics (fonts, size and styles, backgrounds, etc.) that are suited for each type of presentation format and material.
- 200.04 Demonstrate knowledge of copyright laws including copyright statute, disclaimers, and filing procedures.
- 200.05.1 Research and identify skills needed for career positions in multimedia
- 200.05.2 Demonstrate an understanding of graphic and other file formats (e.g., EPS, TIFF, JPEG, ASCII, MPEG, MIDI, AVI, WAV, etc.) and knowledge of image size when scanning and saving files for use in different presentation types (Web, computer, print, etc.)
- 200.06 Demonstrate knowledge of presentation vocabulary/terms.

201.0 DEMONSTRATE PROFICIENCY IN USING PRESENTATION SOFTWARE AND EQUIPMENT

- The student will be able to:

201.02 Produce a presentation that includes music, animation, and digital photography and present it using a projection system.

OCCUPATIONAL COMPLETION POINT - DATA CODE B

MUTIMEDIA JUNIOR DESIGNER - Industry Title SOC Code 27-2012.01

Secondary:

WORK-BASED LEARNING

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

- 20.41 Participate in work-based learning experiences in a Web design services environment.
- 20.42 Discuss the use of technology in a Web design services environment.
- 20.43 Compare and contrast the software applications used in a Web design 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 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—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 and select appropriate multimedia tools.
- 55.0 DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW—The student will be able to:
 - 55.01 Identify and describe Web terminology.
 - 55.02 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 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).
 - 57.03 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.

WEB PAGE CREATION

- 203.0 DEMONSTRATE PROFICIENCY IN WEB PAGE DESIGN APPLICABLE TO THE WWW—The student will be able to:
- 203.01 Determine the objectives and the audience for Web pages.
 - 203.02 Identify design strategies to reach and keep an audience
 - 203.03 Use storyboarding to plan a Web site.

- 203.04 Create styles and other design elements (e.g. backgrounds, colors, fonts, buttons, etc.)
- 204.0 DEMONSTRATE AN UNDERSTANDING OF HTML COMMANDS
 - 204.01 Compare WYSIWG editors to non-WYSIWG coding.
 - 204.02 Interpret HTML coding on an existing Web page.
 - 204.03 Use HTML commands to write a Web page.
- 205.0 DEMONSTRATE PROFICIENCY IN USING A WYSIWG EDITOR, WEB DESIGN, OR WEB ANIMATION SOFTWARE FOR WEB PAGE DESIGN
 - 205.01 Create Web pages for publication
 - 205.02 Apply style sheets for consistent Web site design.
 - 205.03 Format text for Web pages (e.g., font families, sizes)
 - 205.04 Create and edit images, photographs for Web pages using digital imaging software (e.g. ImageReady in Photoshop).
 - 205.05 Insert created buttons into a Web page and test for accuracy
 - 205.06 Create navigational links
 - 205.07 Insert audio files into a Web page
 - 205.08 Create, edit and integrate video files into a Web page
 - 205.09 Create, edit and integrate animation files into a Web page
 - 205.10 Create Meta commands and key words for search engines
 - 205.11 Optimize page size for effective downloading to browsers
 - 205.12 Create and incorporate a form in a Web page
 - 205.13 Edit and test links for accuracy and validity
 - 205.14 Optimize images to make them "Web ready"
 - 205.15 Demonstrate knowledge of image formats related to photos and graphics on the Internet (e.g. Graphic formats (Tiff & EPS), Web formats (JPEG, GIF, PNG), etc.)
 - 205.16 Demonstrate an understanding of photograph compression factors such as transmission speed, color reduction, and browser support
 - 205.17 Save and export a photograph to the Web in the format best for image quality and file size.
 - 205.18 Demonstrate knowledge of the terms and vocabulary used with the animation process, animation software, and types of animation (e.g. 2D vs. 3D, Cel and Keyframe animation).

*******THIS ENDS THE SECONDARY PORTION OF THE PROGRAM.*******

Post Secondary OCP B:

Web Page Design Fundamentals

This OCP 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.

WORK-BASED LEARNING

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

- 20.41 Participate in work-based learning experiences in a Web design services environment.
- 20.42 Discuss the use of technology in a Web design services environment.
- 20.43 Compare and contrast the software applications used in a Web design 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).
- 41.12 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 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—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 and select appropriate multimedia tools.

- 55.0 DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW—The student will be able to:
- 55.01 Identify and describe Web terminology.
 - 55.02 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 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).

57.03 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.

DESCRIPTION: This OCP is designed to provide a basic understanding of Web page layout and integration of video and animation into Web pages. Special emphasis is placed on good design, proper usage of typography and images for delivery on the Internet. After successful completion, students will have met Occupational Completion Point - Data Code B Multimedia Jr. Designer (Industry Title) SOC Code 27-2012.01

WEB PAGE CREATION

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

- 203.01 Determine the objectives and the audience for Web pages.
- 203.02 Identify design strategies to reach and keep an audience
- 203.03 Use storyboarding to plan a Web site.
- 203.04 Create styles and other design elements (e.g. backgrounds, colors, fonts, buttons, etc.)

204.0 DEMONSTRATE AN UNDERSTANDING OF HTML COMMANDS

- 204.01 Compare WYSIWG editors to non-WYSIWG coding.
- 204.02 Interpret HTML coding on an existing Web page.
- 204.03 Use HTML commands to write a Web page.

205.0 DEMONSTRATE PROFICIENCY IN USING A WYSIWG EDITOR, WEB DESIGN, OR WEB ANIMATION SOFTWARE FOR WEB PAGE DESIGN

- 205.03 Create Web pages for publication.
- 205.04 Apply style sheets for consistent Web site design.
- 205.03 Format text for Web pages (e.g., font families, sizes)
- 205.04 Create and edit images, photographs for Web pages using digital imaging software (e.g. ImageReady in Photoshop).
- 205.05 Insert created buttons into a Web page and test for accuracy
- 205.06 Create navigational links.
- 205.07 Insert audio files into a Web page.
- 205.08 Create, edit and integrate video files into a Web page.
- 205.09 Create, edit and integrate animation files into a Web page.
- 205.10 Create Meta commands and key words for search engines.
- 205.11 Optimize page size for effective downloading to browsers.
- 205.12 Create and incorporate a form in a Web page.
- 205.15 Edit and test links for accuracy and validity.
- 205.16 Optimize images to make them "Web ready".
- 205.17 Demonstrate knowledge of image formats related to photos and graphics on the Internet (e.g. Graphic formats (Tiff & EPS), Web formats (JPEG, GIF, PNG), etc.
- 205.18 Demonstrate an understanding of photograph compression factors such as transmission speed, color reduction, and browser support.
- 205.19 Save and export a photograph to the Web in the format best for image quality and file size.
- 205.20 Demonstrate knowledge of the terms and vocabulary used with the animation process, animation software, and types of animation (e.g. 2D vs. 3D, Cel and Keyframe animation).

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Post Secondary OCP C:

Digital Video and Sound Fundamentals

DESCRIPTION: This OCP covers advanced planning and video editing for multimedia presentations. Students design presentations through various steps of development, implementation, testing, and final output. After successful completion, students will have met Occupational Completion Point - Data Code C, Multimedia Designer. (Industry Title) SOC Code 27-1014

PRESENTATION PRODUCTION

201.0 DEMONSTRATE PROFICIENCY IN USING PRESENTATION SOFTWARE AND EQUIPMENT
The student will be able to:

- 201.03 Using presentation software, create a multimedia presentation that incorporates shot and edited video, animation, music, narration and adheres to good design principles, use of transitions, and effective message conveyance.
- 201.04 Demonstrate knowledge of the roles and responsibilities of a multimedia production team (e.g. project manager, creative or design director, content experts, writers, graphic designers, animators, sound designers, videographer, interface designers/programmers, etc.)
- 201.05 Collaborate with team members to plan, edit, evaluate, and present a multimedia presentation where individuals on the team function in specific production roles that were outlined in mastery of 201.04.

VIDEO EDITING

202.0 DEMONSTRATE PROFICIENCY USING VIDEO EDITING SOFTWARE AND EQUIPMENT -
The student will be able to:

- 202.01 Demonstrate knowledge of video and sound editing vocabulary, terms, and acronyms.
- 202.02 Demonstrate knowledge of non-linear editing software (NLEs) and compare the strengths and weaknesses of these programs.
- 202.03 Identify components of non-linear video editing equipment
- 202.04 Set-up non-linear video editing equipment
- 202.05 Compare offline to "real time" video editing
- 202.06 Use storyboarding to plan a short nonlinear video project that includes existing video footage with a title, transitions, background sound, voice-over, animation, and rolling credits.
- 202.07 Create and edit a movie using video editing software that includes existing video footage with a title, transitions, background sound, voice-over, and rolling credits and output to video.
- 202.08 Collaborate with team members to create a short movie utilizing good lighting and sound: plan, shoot, and edit video footage as a team.
- 202.09 Using a video editor, create animated GIFs.

- 202.10 Collaborate with team members to plan, edit, and shoot video footage utilizing advanced video editing techniques and output to video.
- 202.11 Discuss the use of batch processing and project trimming
- 202.12 Plan, create, edit and present a short nonlinear QuickTime movie with title, transitions, sub and virtual clips, sound, background music, voice-over, and credits.

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Post Secondary OCP D:

Video/Presentation Production

DESCRIPTION: This OCP emphasizes the skills needed to create interactive applications for use in a kiosk, CD, DVD, e-merchandizing application, computer-based training or corporate presentation. Special attention is given to scripting and design considerations. Vector and bit-mapped graphics software, video, sound, and authoring software will be utilized. After successful completion, students will have met Occupational Completion Point - Data Code D, Multimedia Producer. (Industry Title) SOC Code 27-1014

PRESENTATION PRODUCTION

201.0 DEMONSTRATE PROFICIENCY IN USING PRESENTATION SOFTWARE AND EQUIPMENT-The student will be able to:

- 201.06 Create a self-running presentation with synchronized audio, convert presentation slides into streaming ASF files for use on the Web.

AUTHORING PRODUCTION

207.0 DEVELOP PROFICIENCY IN USING AUTHORING SOFTWARE-The student will be able to:

- 207.01 Plan interactive projects for use in a kiosk, CD, DVD, E-merchandizing, computer-based presentation or training or corporate presentation
- 207.02 Use authoring software to create an interactive project for use in a kiosk, CD, DVD, merchandizing application, computer-based training or corporate presentation.
- 207.03 Have the created interactive project evaluated and tested by users and make modifications to improve the project.
- 207.04 Collaborate with team members to plan, edit, evaluate, and present a multimedia interactive presentation or product.

WORK-BASED LEARNING

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

- 20.55 Participate in work-based learning experiences in a multimedia environment

Post Secondary OCP E:

Multimedia Production Marketing

DESCRIPTION:

This OCP emphasizes the skills needed to create a marketing portfolio that emphasizes student achievement targeted towards employment and presentation of multimedia production skills to industry representatives. After successful completion, students will have met Occupational Completion Point - Data Code E, Multimedia Specialist. (Industry Title) SOC Code 27-1014

PRESENTATION PRODUCTION

JOB READINESS AND CAREER DEVELOPMENT

208.0 APPLY JOB READINESS, CAREER PLANNING AND JOB SEEKING SKILLS TO OBTAIN PERSONAL AND PROFESSIONAL GOALS—The student will be able to:

- 208.01 Create a digital resume
- 208.02 Create a digital portfolio
- 208.03 Market multimedia production skills for employment

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basics and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications, so that they may be used as communication tools for enhancing personal and work place proficiency in an information-based society. This also includes proficiency with computers using databases, spreadsheets, presentation applications, and the integration of these programs using software that meets industry standards. After successful completion of this core course, students will have met Occupational Completion Point - Data Code A, Information Technology Assistant SOC Code 43-4000

INFORMATION SYSTEMS

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

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 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 Demonstrate basic computer file management skills.
- 01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 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.

- 02.04 Prepare and deliver an oral report with appropriate materials to the class
 - 02.05 Participate in large group discussions as a member and/or a leader.
 - 02.06 Take notes, organize, summarize, and paraphrase ideas and details.
 - 02.07 Accurately follow written and oral instructions.
 - 02.08 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.
 - 03.02 Use the writing process to create and edit business documents appropriate to the subject matter, purpose, and audience.
 - 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
 - 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.
- 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:

- 08.01 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, follow-up).
- 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.
 - 10.02 Apply appropriate strategies to manage and resolve conflicts in work situations.
 - 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.).

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

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

COURSE DESCRIPTION:

This course is designed to provide an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry and basic web design concepts. The content includes information technology career research; operating systems and software applications; electronic communications including e-mail and Internet services; basic HTML, DHTML, and XML web commands and design; and 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.
- 01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.

WORKPLACE COMMUNICATIONS

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

- 02.03 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
- 02.62 Organize ideas and communicate oral and written messages appropriate for information technology environments.
- 02.63 Collaborate with individuals and teams to complete tasks and solve information technology problems.
- 02.64 Identify, define, and discuss professional information technology terminology appropriate for internal and external communications in an information technology environment.
- 02.65 Apply the writing process to the creation of appropriate documents following designated business formats.

02.66 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).

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

03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.

03.06 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

MANAGEMENT

04.0 DEVELOP AN AWARENESS OF MANAGEMENT FUNCTIONS AN 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.

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:

06.03 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, 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 ROM's).
 - 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.
 - 57.28 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 proficiency using 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:

- 69.04 Identify how types 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.
- 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.

SOFTWARE APPLICATIONS

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

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

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

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

Manufacturing, 3D animation, process control, materials management, etc.)

71.06 Demonstrate the ability to incorporate digital sound.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8212430
Course Title: Multimedia Foundations 1
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide a basic understanding of fundamentals of multimedia. Students learn to plan and create presentations that incorporate scanned images, and images created in various formats and mediums. After successful completion, students will have met Occupational Completion Point - Data Code A, Multimedia Production Assistant (Industry Title) SOC Code 27-2012.01

200.0 DEMONSTRATE KNOWLEDGE OF PRESENTATION PRODUCTION ISSUES—The student will be able to:

- 200.01 Identify characteristics of various types of presentations (informing, selling, teaching, and entertaining).
- 200.02 Identify presentation materials (e.g. handouts, seminar notebooks, business cards, coupons, etc.) and presentation marketing mediums (ex. print media such as newspaper, magazines; TV; movies; computer presentations; interactive CD ROM; kiosks, and Web pages, etc.).
- 200.03 Identify design characteristics (fonts, size and styles, backgrounds, etc.) that are suited for each type of presentation format and material.
- 200.04 Demonstrate knowledge of copyright laws including copyright statute, disclaimers, and filing procedures.
- 200.05 Research and identify skills needed for career positions in multimedia.
- 200.06 Demonstrate an understanding of graphic and other file formats (e.g., EPS, TIFF, JPEG, ASCII, MPEG, MIDI, AVI, WAV, etc.) and knowledge of image size when scanning and saving files for use in different presentation types (Web, computer, print, etc.)
- 200.07 Demonstrate knowledge of presentation vocabulary/terms.

201.0 DEMONSTRATE PROFICIENCY IN USING PRESENTATION SOFTWARE AND EQUIPMENT—The student will be able to:

- 201.02 Produce a presentation that includes music, animation, and digital photography and present it using a projection system.

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Secondary Course Number: 8207110
Course Title: Web Design 1
Course 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 Web Design 1 and 2, students will have met Occupational Completion Point - Data Code B, Assistant Web Designer - SOC Code 15-1031.

WORK-BASED LEARNING

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

- 20.41 Participate in work-based learning experiences in a Web design services environment.
- 20.42 Discuss the use of technology in a Web design services environment.
- 20.43 Compare and contrast the software applications used in a Web design 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).
- 41.13 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 DEMONSTRATE PROFICIENCY USING OPERATING SYSTEMS—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 and select appropriate multimedia tools.
- 55.0 DEMONSTRATE PROFICIENCY NAVIGATING THE INTERNET, INTRANET, AND THE WWW—The student will be able to:
- 55.01 Identify and describe Web terminology.
 - 55.02 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 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).

57.03 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.

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Course Number: 8212440
Course Title: Multimedia Foundations 2
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to provide a basic understanding of Web page layout and integration of video and animation into Web pages. Special emphasis is placed on good design, proper usage of typography and images for delivery on the Internet. After successful completion of Multimedia Foundations 2 and 3, students will have met Occupational Completion Point - Data Code B Multimedia Jr. Designer (Industry Title) SOC Code 27-2012.01

WEB PAGE CREATION

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

- 203.01 Determine the objectives and the audience for Web pages.
- 203.02 Identify design strategies to reach and keep an audience
- 203.03 Use storyboarding to plan a Web site.
- 203.04 Create styles and other design elements (e.g. backgrounds, colors, fonts, buttons, etc.)

204.0 DEMONSTRATE AN UNDERSTANDING OF HTML COMMANDS

- 204.01 Compare WYSIWG editors to non-WYSIWG coding.
- 204.02 Interpret HTML coding on an existing Web page.
- 204.03 Use HTML commands to write a Web page.

205.0 DEMONSTRATE PROFICIENCY IN USING A WYSIWG EDITOR, WEB DESIGN, OR WEB ANIMATION SOFTWARE FOR WEB PAGE DESIGN

- 205.05 Create Web pages for publication.
- 205.06 Apply style sheets for consistent Web site design.
- 205.03 Format text for Web pages (e.g., font families, sizes)
- 205.04 Create and edit images, photographs for Web pages using digital imaging software (e.g. ImageReady in Photoshop).
- 205.05 Insert created buttons into a Web page and test for accuracy.
- 205.06 Create navigational links.
- 205.07 Insert audio files into a Web page.
- 205.08 Create, edit and integrate video files into a Web page.
- 205.09 Create, edit and integrate animation files into a Web page.

Florida Department of Education

STUDENT PERFORMANCE STANDARDS

Course Number: 8212450
Course Title: Multimedia Foundations 3
Course Credit: 1

COURSE DESCRIPTION:

This course is designed to FURTHER provide a basic understanding of Web page layout and integration of video and animation into Web pages. Special emphasis is placed on good design, proper usage of typography and images for delivery on the Internet. After successful completion of Multimedia Foundations 2 and 3, students will have met Occupational Completion Point - Data Code B Multimedia Jr. Designer (Industry Title) SOC Code 27-2012.01

205.0 DEMONSTRATE PROFICIENCY IN USING A WYSIWG EDITOR, WEB DESIGN, OR WEB ANIMATION SOFTWARE FOR WEB PAGE DESIGN

- 205.10 Create Meta commands and key words for search engines
- 205.11 Optimize page size for effective downloading to browsers
- 205.12 Create and incorporate a form in a Web page
- 205.21 Edit and test links for accuracy and validity
- 205.22 Optimize images to make them "Web ready"
- 205.15 Demonstrate knowledge of image formats related to photos and graphics on the Internet (e.g. Graphic formats (Tiff & EPS), Web formats (JPEG, GIF, PNG), etc.)
- 205.16 Demonstrate an understanding of photograph compression factors such as transmission speed, color reduction, and browser support.
- 205.17 Save and export a photograph to the Web in the format best suited for image quality and file size.
- 205.18 Demonstrate knowledge of the terms and vocabulary used with the animation process, animation software, and types of animation (e.g. 2D vs. 3D, Cel and Keyframe animation).

*****THIS ENDS THE SECONDARY PORTION OF THE PROGRAM.*****