

Florida Department of Education  
CURRICULUM FRAMEWORK

**Program Title:** Academy of Information Technology  
**Program Type:** Job Preparatory  
**Occupational Area:** Business Technology Education  
**Components:** Three Occupational Completion Points including Core

Secondary

**Program Number:** 8207300  
**CIP Number:** 0507.030301  
**Grade Level:** 9-12  
**Standard Length:** 7 credits  
**Certification:** BUS ED @4 1 @2  
 BUS DP @7 G  
 ELECT DP @7 G

[OCP B and C Only]  
 Additional certification accepted:  
 CTSO: COMP SCI @6 @2  
 FBLA  
 BPA  
 Coop Method: Yes  
 Apprenticeship: No  
 Facility Code: 212

- I. **PURPOSE:** This program is designed to prepare students for employment as a General Office Clerk, Computer Programmer Aide, and Computer Support Specialist.

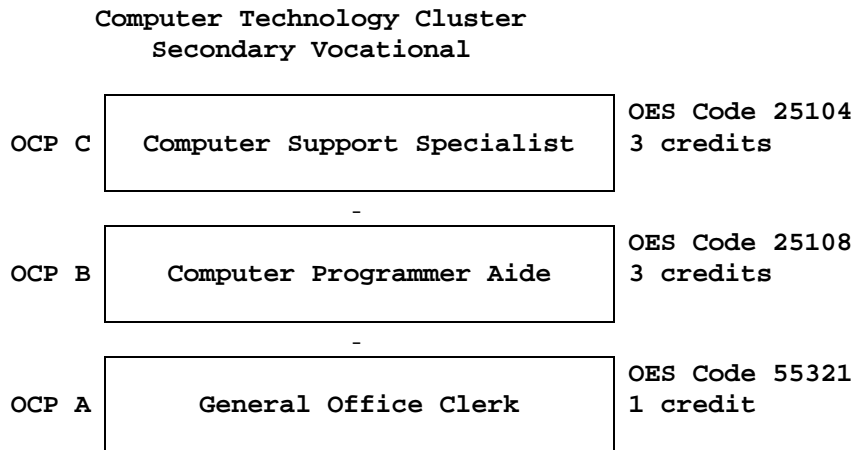
Students are introduced to the concepts of information technology—the study, design, development, implementation, support and management of computer-based information systems, particularly software applications and computer hardware. Using the National Academy Foundation model, the Academy of Information Technology is a four-year information technology-oriented sequence of courses that align relevant academic, employment, and workplace standards with opportunities to partner with postsecondary institutions.

This program offers a broad foundation of knowledge, skills, and concepts to prepare students for employment in the information technology industry and to develop and support a systemic solution to the growing demand for core information technology workers. The content includes the development of the following information technology skills and concepts: computer application skills including computer keyboarding, software applications (e.g., word processing, spreadsheet, database, presentation, desktop publishing), e-mail, Internet browser applications, computer programming (e.g., Scheme, C++, HTML), web page design and advanced web tools, systems support and maintenance, basic network concepts, basic concepts of relational database engines and the tools to use them, digital media (e.g., audio, video, graphics, text, and animation tools), and multimedia tools; extensive exploration of information technology careers; strategies for success including goal setting, study skills, organizing skills, learning styles, employability skills, and service learning; and core academic skills with a strong emphasis on effective communication skills.

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

- II. **PROGRAM STRUCTURE:** This program is a planned sequence of instruction consisting of the Business Technology Education Core (Business Systems and Technology 1 - OCP A) and two additional occupational completion points. Secondary students who have previously completed the Business Technology Education Core will not have to repeat the core. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or exit as an occupational completer.

The following diagram illustrates the Academy of Information Technology program structure:



This program consists of the following courses which include the Business Technology Education Core:

- Business Technology Education Core
- 8209020 - Business Systems and Technology 1 (Business Systems and Technology
- 8207310 - Introduction to Information Technology
- 8207320 - AOIT Beginning Programming
- 8207330 - AOIT Advanced Programming
- 8203051 - AOIT PC Services/Networking
- 8207350 - AOIT Internship
- 8207360 - AOIT Multimedia Design

- III. **LABORATORY ACTIVITIES:** Laboratory activities are an integral part of this program and include the use of keyboarding systems, computers, and peripheral equipment.
- IV. **SPECIAL NOTES:** Future Business Leaders of America 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.

The Academy of Information Technology program aligns with the Academy of Information Technology model developed by the National Academy Foundation. In order to provide the true meaning of the Academy concept, a total interdisciplinary approach should be implemented. Instructional strategies for infusion of information technology concepts into the core academic subjects of language arts, math, science, and social studies are available through the National Academy Foundation. It is through a balanced and integrated curriculum that students attain the attitudes, skills, and knowledge needed to compete successfully in today's work force. To achieve total curriculum integration, academic and career and technical education Academy teachers should be scheduled with common planning times.

The Academy of Information Technology emphasizes the development of abilities and/or awareness necessary to function in a highly technological society. The use of cooperative learning groups is recommended. By learning and practicing group process skills, students will be prepared to work "together" in real work situations. Program graduates will develop enhanced self-esteem as well as the problem solving and teamwork skills necessary to succeed in careers and postsecondary education. Students will gain knowledge about career paths, have access to business role models, and have choices they would not otherwise have.

The Academy of Information Technology places a strong emphasis on workplace learning. E-coaching, shadowing, and mentoring experiences with information technology professionals along with on-site trips to local businesses connect classroom learning to the workplace. In-class guest speakers bring the real world into the classroom.

In addition, a six- to eight-week paid student internship is required. The following is required for each student employed in the AOIT Internship course: an internship agreement among students, parents, and employers; a job performance skills plan signed by the student, AOIT teacher, and employer listing the competencies developed through classroom experiences and the on-the-job duties and tasks to be performed during the internship; documentation signed by the student and employer that the student worked the minimum 150 hours required to earn one high school credit; and an evaluative criteria of the student's on-the-job performance.

The AOIT teacher must visit each intern site a minimum of once during each term of the internship for the purpose of evaluating the student's progress in attaining the competencies listed in the job performance skills plan and in determining the student's grade for the internship course.

The Academy of Information Technology is designed as a Tech Prep program of study. Therefore, articulation agreements must be developed with postsecondary institutions so that students have the opportunity to earn college and/or postsecondary vocational credits while in high school.

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

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

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

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

**OCCUPATIONAL COMPLETION POINT - DATA CODE A**

GENERAL OFFICE CLERK - OES Code 55321

- 01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 01.01, 01.02, 01.03, 1.04, 01.05, 01.06, 01.07, 01.08]
- 02.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.01, 02.02, 02.03, 02.04, 02.05]
- 03.0 Use technology to enhance the effectiveness of communication skills. [Student Performance Standards: 03.01, 03.02, 03.03, 03.04, 03.05, 03.06]
- 04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. [Student Performance Standards: 04.01, 04.02, 04.03]
- 05.0 Practice quality performance in the learning environment and the workplace. [Student Performance Standards: 05.01, 05.02]
- 06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 06.01, 06.02, 06.03]
- 07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 07.01, 07.02, 07.03]
- 08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development,

- and life goals. [Student Performance Standards: 08.01, 08.02, 08.03]
- 09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. [Student Performance Standards: 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08]
- 10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace. [Student Performance Standards: 10.01, 10.02, 10.03]
- 11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance. [Student Performance Standards: 11.01, 11.02]

**OCCUPATIONAL COMPLETION POINT - DATA CODE B**

COMPUTER PROGRAMMER AIDE - OES CODE 25108

- 02.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.44, 02.46, 02.47, 02.53, 02.54, 02.55, 02.56, 02.61, 02.62, 02.63, 02.64, 02.65, 02.66, 02.67, 02.68, 02.69, 02.70, 02.71.](LA.A.1.4)(LA.B.1.4)(LA.B.1.4)(LA.C.1.4)(LA.C.2.4)
- 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: 07.10, 07.11.](MA.A.2.4)(MA.A.4.4)(MA.B.1.4)(MA.A.4.4)
- 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.](LA.A.1.4)(LA.A.2.4)
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.25, 20.27, 20.44, 20.45, 20.46.](LA.D.2.4)(LA.C.3.4)(LA.B.2.4)
- 23.0 Identify functions of information processing. [Student Performance Standards: 23.05, 23.13](LA.B.2.4)(MA.A.3.4)(VA.A.1.4)
- 24.0 Identify functions of computers. [Student Performance Standards: 24.01, 24.02, 24.04](VA.A.1.4)(LA.B.2.4)
- 25.0 Test programs. [Student Performance Standards: 25.01, 25.03, 25.04, 25.05, 25.06, 25.07, 25.09, 25.xx](LA.A.2.4)(LA.B.1.4)
- 26.0 Plan program design. [Student Performance Standards: 26.01, 26.02, 26.03, 26.04, 26.07, 26.xx](LA.B.1.4)(LA.A.1.4)(LA.A.2.4)
- 27.0 Code programs. [Student Performance Standards: 27.01, 27.02, 27.03, 27.07, 27.08, 27.09, 27.10, 27.xx](LA.B.1.4)
- 28.0 Perform program maintenance. [Student Performance Standards: 28.05}
- 29.0 Create and maintain documentation. [Student Performance Standards: 29.02](LA.A.2.4)
- 34.0 Develop an awareness of software quality assurance. [Student Performance Standards: 34.01, 34.03, 34.04]

- 36.0 Develop an understanding of programming techniques and concepts. [Student Performance Standards: 36.01](MA.A.3.4)(MA.A.4.4)(MA.E.1.4)
- 41.0 Perform e-mail activities. [Student Performance Standards: 41.01, 41.09, 41.10, 41.11, 41.12, 41.14, 41.15.](LA.A.1.4.1)
- 42.0 Demonstrate proficiency using operating systems. [Student Performance Standards: 42.01, 42.10 42.12, 42.14. 42.15]
- 46.0 Develop electronic communications skills. [Student Performance Standards: 46.01, 46.03, 46.05, 46.07, 46.08, 46.09, 46.10.](LA.B.2.4)(MA.A.1.4)
- 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.](LA.A.1.4) (LA.A.2.4)
- 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.](FL.A.1.4) (LA.B.1.4)
- 57.0 Demonstrate proficiency in page design applicable to the WWW. [Student Performance Standards: 57.01, 57.02, 57.03, 57.04, 57.05, 57.25, 57.26, 57.27.](VA.A.1.4) VA.E.1.4) (MA.A.1.4)
- 58.0 Develop an awareness of Internet/Intranet tools. [Student Performance Standards: 58.01, 58.07, 58.08](LA.A.2.4) (LA.B.2.4)
- 63.0 Demonstrate proficiency using specialized web design software. [Student Performance Standards: x63.01, 63.02.] (VA.A.1.4)
- 64.0 Develop an awareness of the information technology industry. [Student Performance Standards: 64.01, 64.02, 64.03, 64.04.](LA.A.1.4) (LA.D.2.4)
- 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.](LA.A.1.4) (MA.A.1.4)
- 66.0 Develop an awareness of programming languages. [Student Performance Standards: 66.01, 66.02, 66.03, 66.04.] (FL.A.1.4) (LA.A.1.4) (MA.A.1.4)
- 67.0 Develop an awareness of emerging technologies. [Student Performance Standards: 67.01, 67.02, 67.03.] (LA.A.1.4) (LA.D.2.4)
- 68.0 Develop an awareness of application architecture. [Student Performance Standards: 68.01, 68.02, 68.03, 68.04.](LA.A.1.4) (MA.A.1.4)
- 69.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model. [Student Performance Standards: 69.01, 69.02, 69.03.](LA.A.1.4)
- 70.0 Demonstrate proficiency using common software applications. [Student Performance Standards: 70.01, 70.02.] (LA.B.1.4) (LA.D.2.4)
- 71.0 Demonstrate proficiency using specialized software applications. [Student Performance Standards: 71.01, 71.02.](MA.A.1.4)(LA.A.1.4)(LA.B.1.4)
- 72.0 Design structured programs. [Student Performance Standards: 72.01, 72.02, 72.03, 72.04.](MA.E.1.4)(LA.B.1.4)

PLEASE NOTE: Additional Intended Outcomes and Student Performance Standards to be identified by July 2002

**OCCUPATIONAL COMPLETION POINT - DATA CODE C**  
**COMPUTER SUPPORT SPECIALIST - OES CODE 25104**

- 02.0 Use technology to apply and enhance communication skills in technical reading, writing, speaking, listening, and viewing. [Student Performance Standards: 02.24, 02.27, 02.28, 02.30, 02.48, 02.49, 02.50, 02.51, 02.52, 02.53, 02.60, 02.72, 02.73, 02.74, 02.75.]
- 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, 06.18, 06.19, 06.20, 06.21, 06.22, 06.23.]
- 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: 09.22, 09.23, 09.24, 09.25, 09.27, 09.28, 09.29, 09.30, 09.31, 09.32, 09.33, 09.34, 09.35, 09.36.]
- 10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace. [Student Performance Standards: 10.05, 01.06, 10.07.]
- 20.0 Participate in work-based learning experiences. [Student Performance Standards: 20.26, 20.27, 20.28, 20.48, 20.49, 20.50, 20.51, 20.52, 20.53.]

PLEASE NOTE: Additional Intended Outcomes and Student Performance Standards to be identified by July 2002, and July 2003

**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

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

**COURSE DESCRIPTION:**

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

**INFORMATION SYSTEMS**

01.0 DEMONSTRATE KNOWLEDGE, SKILL, AND APPLICATION OF INFORMATION SYSTEMS TO ACCOMPLISH JOB OBJECTIVES AND ENHANCE WORKPLACE PERFORMANCE—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 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 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING, SPEAKING, LISTENING, AND VIEWING—The student will be able to:

- 02.01 Select and use modes of communication appropriate to specific job and workplace situations.
- 02.02 Organize ideas and communicate oral and written messages appropriate to listeners and situations in workplace and business environments.
- 02.03 Use listening, speaking, and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.



- 02.04 Select and use standard written business communication formats.
- 02.05 Use professional business vocabulary appropriate for entry-level jobs in business environments.

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.
- 03.04 Explore and demonstrate effective and efficient use of telecommunications systems including telephone techniques and procedures for handling incoming and placing outgoing business calls.
- 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 Experience work-based learning through volunteerism, job shadowing, mentoring, e-coaching, etc.

#### **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**

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

**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 commands; emerging technologies; and Web page design. After successful completion of Introduction to Information Technology, AOIT Beginning Programming, and AOIT Advanced Programming, students will have met Occupational Completion Point - Data Code B, Computer Programmer Aide - OES Code 25108.

**WORKPLACE COMMUNICATIONS**

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

- 02.61 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 information technology-related 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.).

**JOB READINESS AND CAREER DEVELOPMENT**

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.

#### **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.
  - 20.45 Discuss the application of information technology principles 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.
  - 41.09 Use the Internet to perform e-mail activities.
- 42.0 DEMONSTRATE PROFICIENCY USING 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).
  - 42.15 Demonstrate proficiency with various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).
- 46.0 DEVELOP ELECTRONIC COMMUNICATIONS SKILLS—The student will be able to:
  - 46.01 Explain the operation of the Internet, its importance today, and its brief history.
  - 46.03 Exhibit proficiency in using Internet services.
  - 46.05 Exhibit proficiency in downloading Internet information.
  - 46.07 Exhibit proficiency in using various features of a browser.
  - 46.08 Demonstrate ethical use of the Internet.
  - 46.09 Perform web-based research.
  - 46.10 Explain the extent of regulatory control over the Internet.

#### **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.
  - 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!, Northern Light, Lycos, Excite, etc.).
  - 55.17 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, pdf, etc.).
- 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).
  - 57.03 Identify and convert graphic formats.
  - 57.04 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD 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.
  - 57.27 Demonstrate proficiency in adding Java scripts to web pages.
- 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.
- 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 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.
  - 64.02 Describe the evolution of computer systems from their inception to the present and into the future.
  - 64.03 Describe and apply strategies for evaluating and implementing emerging technologies.
  - 64.04 Explain the emergence of e-commerce and e-government and the potential impact on business and 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.
- 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 (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

68.0 DEVELOP AN AWARENESS OF APPLICATION ARCHITECTURE-The student will be able to:

- 68.01 Explain the appropriate use of graphical user interface (GUI) systems.
- 68.02 Describe and apply strategies for using client-server architecture.
- 68.03 Define Online Transaction Processing (OLTP) and its uses.
- 68.04 Explain the need for web-based applications.

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

- 69.01 Describe the evolution of OSI from its inception to the present and into the future.
- 69.02 Explain the interrelations of the seven layers of the Open Systems Interface (OSI).
- 69.03 Explain where the OSI model 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.).

#### **SPECIALIZED SOFTWARE APPLICATIONS**

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.).



**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

**Course Number:** 8207320  
**Course Title:** AOIT Beginning Programming  
**Course Credit:** 1

**COURSE DESCRIPTION:**

This course introduces computer programming concepts for information technology applications using the Scheme programming language and an introduction to programming concepts using the C++ object-oriented programming language. The content includes information technology career research, computer functions, and programming techniques and concepts. Emphasis is placed on the techniques needed to develop well-documented, structured computer programs using object-oriented programming languages. After successful completion of Introduction to Information Technology, AOIT Beginning Programming, and AOIT Advanced Programming, students will have met Occupational Completion Point - Data Code B, Computer Programmer Aide - OES Code 25108.

**WORKPLACE COMMUNICATIONS**

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

- 02.44 Demonstrate active listening techniques.
- 02.46 Identify relevant information in oral messages.
- 02.47 Determine when more information is needed and ask appropriate questions.
- 02.67 Use professional business vocabulary appropriate for computer programming environments.
- 02.68 Organize ideas and communicate oral and written messages appropriate for computer programming environments.
- 02.69 Collaborate with individuals and teams to complete tasks and solve computer programming problems.
- 02.70 Apply the writing process to the creation of computer programming-related documents following designated business formats.
- 02.71 Use critical reading, analytical thinking, creative synthesis, and attention to detail as they relate to computer programming tasks.

**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:

- 07.10 Demonstrate an understanding of how computations work (e.g., precedence of mathematical and logical operators).
- 07.11 Solve computational problems in a systematic manner.

**JOB READINESS AND CAREER DEVELOPMENT**

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 career opportunities in computer programming.
- 09.18 Analyze personal skills and aptitudes in comparison with computer programming career opportunities.
- 09.19 Refine and implement a plan to facilitate personal growth and skill development related to computer programming career opportunities.
- 09.21 Update and maintain an electronic career portfolio.

#### **WORK-BASED LEARNING**

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

- 20.25 Participate in work-based learning experiences in a computer programming environment.
- 20.47 Discuss the use of business computer programming technology in an information technology environment.

#### **PROGRAMMING/SOFTWARE ENGINEERING**

23.0 IDENTIFY FUNCTIONS OF INFORMATION PROCESSING—The student will be able to:

- 23.05 Identify needs for software development in business.
- 23.13 Identify characteristics of object-oriented languages.

24.0 IDENTIFY FUNCTIONS OF COMPUTERS—The student will be able to:

- 24.01 Identify computer hardware and software.
- 24.02 Identify generic data processing terminology.
- 24.04 Sequence and define the steps in the input, processing, output, and storage cycle.

25.0 TEST PROGRAMS—The student will be able to:

- 25.01 Develop a plan for testing programs.
- 25.03 Develop data for use in program testing.
- 25.04 Perform debugging activities.
- 25.05 Distinguish among the different types of program and design errors.
- 25.06 Evaluate program test results.
- 25.07 Execute programs and subroutines as they relate to the total application.
- 25.09 Compile and run programs.
- 25.10 Develop examples that illustrate the core behavior of each program.
- 25.11 Develop examples that illustrate the core behavior of each program component.
- 25.12 Illustrate the behavior of boundary cases.
- 25.13 Demonstrate an understanding that engineering artifacts requires rigorous and systematic testing.
- 25.14 Use examples to show that the solution meets pre-determined criteria.

- 25.15 Demonstrate understanding that testing can expose problems but not prove the correctness of the design in an absolute sense.
- 26.0 PLAN PROGRAM DESIGN—The student will be able to:
  - 26.01 Formulate a plan to determine program specifications individually or in groups.
  - 26.02 Use a graphical representation or pseudocode to represent the structure in a program or subroutine.
  - 26.03 Design programs to solve problems using problem-solving strategies.
  - 26.04 Prepare proper input/output layout specifications.
  - 26.07 Manually trace the execution of programs and verify that programs follow the logic of their design as documented.
  - 26.08 Analyze problem statements.
  - 26.09 Determine what kind of information the desired program must process.
  - 26.10 Formulate concise descriptions of a program's task and purpose.
  - 26.11 Formulate concise descriptions of task and purpose of a program's pieces.
  - 26.12 Organize programs according to the problem analysis.
  - 26.13 Recognize changes in the problem statement.
  - 26.14 Suggest changes in the program organization.
- 27.0 CODE PROGRAMS—The student will be able to:
  - 27.01 Utilize reference manuals.
  - 27.02 Write programs according to recognized programming standards.
  - 27.03 Write internal documentation statements as needed in the program source code.
  - 27.07 Code programs using logical statements (e.g., If-Then-Else, Do...While).
  - 27.08 Enter and modify source code using a program language editor.
  - 27.09 Code routines within programs that validate input data.
  - 27.10 Use the rounding function in calculations within programs.
  - 27.11 Code programs in object-oriented languages.
  - 27.12 Demonstrate familiarity with the technique of iterative refinement.
  - 27.13 Select the essential aspects of a problem statement.
  - 27.14 Provide a solution to a problem.
  - 27.15 Extend the solution to cope with more and more parts of the problem statement.
- 28.0 PERFORM PROGRAM MAINTENANCE—The student will be able to:
  - 28.05 Analyze output to identify and annotate errors or enhancements.
- 29.0 CREATE AND MAINTAIN DOCUMENTATION—The student will be able to:
  - 29.02 Follow established documentation standards.
- 34.0 DEVELOP AN AWARENESS OF SOFTWARE QUALITY ASSURANCE—The student will be able to:
  - 34.01 Identify the legal and social consequences of errors in

software.

- 34.03 Describe copyright and other laws that relate to software theft and misuse.
- 34.04 Describe software security measures to protect computer systems and data from unauthorized use and tampering (e.g., physical security, passwords, virus protection/prevention).

36.0 DEVELOP AN UNDERSTANDING OF PROGRAMMING TECHNIQUES AND CONCEPTS—  
The student will be able to:

- 36.01 Identify the basic constructs used in structured programming.

72.0 DESIGN STRUCTURED PROGRAMS—The student will be able to:

- 72.01 Design programs that model mathematical relationships from application areas (e.g., accounting, economics, multimedia, programming, science, web, etc.).
- 72.02 Design programs that deal with multi-faceted objects (e.g., personnel records, physical objects, attributes of HTML tags, etc.).
- 72.03 Design programs that deal with mixed classes of objects (e.g., a class of geometric shapes containing circles, rectangles, triangles, squares, polygons, etc.).
- 72.04 Design programs that deal with objects of undetermined size (e.g., shopping lists, family trees, file directories on computers, web sites, etc.).

**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

**Secondary Course Number:** 8207330  
**Course Title:** AOIT Advanced Programming  
**Course Credit:** 1

**COURSE DESCRIPTION:**

This course continues the study of structured programming and the C++ language and emphasizes more advanced programming concepts using object-oriented programming and more complex data structures. The content includes information technology career research; object-oriented programming techniques and concepts; and the creation and maintenance of database objects to store, retrieve, and manipulate data. Emphasis is placed on computer programming techniques needed to develop well-documented, structured computer programs using the C++ object-oriented programming language in addition to the basic concepts and tools of relational database engines and the importance of data relationships. After successful completion of Introduction to Information Technology, AOIT Beginning Programming, and AOIT Advanced Programming, students will have met Occupational Completion Point - Data Code B, Computer Programmer Aide - OES Code 25108.

**WORKPLACE COMMUNICATIONS**

- 02.0 USE TECHNOLOGY TO APPLY AND ENHANCE COMMUNICATION SKILLS IN TECHNICAL READING, WRITING, SPEAKING, LISTENING, AND VIEWING—The student will be able to:
- 02.53 Use professional business vocabulary appropriate for computer programming and database administration environments.
  - 02.54 Organize ideas and communicate oral and written messages appropriate for computer programming and database administration environments.
  - 02.55 Collaborate with individuals and teams to complete tasks and solve computer programming and database administration problems.
  - 02.56 Apply the writing process to the creation of computer programming- and database administration-related documents following designated business formats.

**JOB READINESS AND CAREER DEVELOPMENT**

- 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:
- 09.22 Research, compare and contrast career pathways in database administration.
  - 09.23 Analyze personal skills and aptitudes in comparison with database administration career opportunities.
  - 09.24 Refine and implement a plan to facilitate personal growth and skill development related to database administration career opportunities.
  - 09.25 Update and maintain an electronic career portfolio.

**WORK-BASED LEARNING**

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

20.25 Participate in work-based learning experiences in a computer programming environment.

20.27 Compare and contrast programming languages used in a computer programming environment.

20.47 Discuss the use of business computer programming technology in an information technology environment.

**PROGRAMMING/SOFTWARE ENGINEERING**

**DATABASE ADMINISTRATION**

PLEASE NOTE: Additional Intended Outcomes and Student Performance Standards to be identified by July 2002

**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

**Course Number:** 8203051  
**Course Title:** AOIT PC Services/Networking  
**Course Credit:** 1

**COURSE DESCRIPTION:**

This course focuses on system support, maintenance, and basic network concepts. The content includes information technology career research and emphasis is placed on developing an understanding of various computer software and hardware applications including installation, troubleshooting, diagnostic techniques, and repair of system components, operating systems, and application software; common safety and preventive maintenance procedures; basic networking including physical and logical network connectivity; and effective behaviors that contribute to customer satisfaction. After successful completion of AOIT PC Services/ Networking, AOIT Internship, and AOIT Multimedia Design, students will have met Occupational Completion Point - Data Code C, Computer Support Specialist - OES Code 25104.

**WORKPLACE COMMUNICATIONS**

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

- 02.24 Develop listening skills to determine customer needs.
- 02.27 Demonstrate probing skills.
- 02.28 Access reference materials.
- 02.30 Apply assertive service techniques.
- 02.60 Demonstrate interactive listening techniques.
- 02.72 Use professional business vocabulary appropriate for PC support services/network environments.
- 02.73 Organize ideas and communicate oral and written messages appropriate for PC support services/networking environments.
- 02.74 Collaborate with individuals and teams to complete tasks and solve PC support services/networking problems.
- 02.75 Apply the writing process to the creation of PC support services/networking-related documents following designated business formats.

**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:

- 06.18 Develop diplomatic methods to communicate with customers.

**JOB READINESS AND CAREER DEVELOPMENT**

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:

- 09.22 Research, compare and contrast career opportunities in PC and network support.
- 09.23 Analyze personal skills and aptitudes in comparison with PC and network support career opportunities.
- 09.24 Refine and implement a plan to facilitate personal growth and skill development related to PC and network support career opportunities.
- 09.25 Update and maintain an electronic career portfolio.

**WORK-BASED LEARNING**

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

- 20.26 Participate in work-based learning experiences in a PC support/networking information technology environment.
- 20.27 Discuss the application of PC support and networking principles in an information technology environment.
- 20.28 Discuss the use of PC support and networking technology in an information technology environment.

**NETWORK/SOFTWARE SUPPORT**

PLEASE NOTE: Additional Intended Outcomes and Student Performance Standards to be identified by July 2002



**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

**Course Number:** 8207350  
**Course Title:** AOIT Internship  
**Course Credit:** 1

**COURSE DESCRIPTION:**

The AOIT internship course provides students with the opportunity to stimulate their career interest and to demonstrate human relations, communications, and employability skills necessary for entry-level employment in the information technology industry. Students will enhance and apply instructional competencies learned in the classroom through the internship experience. After successful completion of AOIT PC Services/Networking, AOIT Internship, and AOIT Multimedia Design, students will have met Occupational Completion Point - Data Code C, Computer Support Specialist - OES Code 25104.

**WORKPLACE COMMUNICATIONS**

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

- 02.48 Demonstrate effective written and oral communication and listening skills in a workplace environment
- 02.49 Use professional business vocabulary related to information technology environments.

**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 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.
- 06.19 Demonstrate the ability to resolve customer, employee, and employee/employer problems and concerns.
- 06.20 Demonstrate acceptable work habits and conduct in the workplace as defined by company policy.
- 06.21 Demonstrate legal and ethical behavior within the scope of job responsibilities.
- 06.22 Apply a positive customer service attitude.
- 06.23 Demonstrate an understanding of the organization's mission and services.

**JOB READINESS AND CAREER DEVELOPMENT**

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:

- 09.20 Update and maintain an electronic career portfolio.
- 09.27 Create an electronic resume.
- 09.28 Apply for an information technology position using a letter of application and resume.
- 09.29 Demonstrate successful interview techniques for an information technology position.

**HUMAN RELATIONS/INTERPERSONAL SKILLS**

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

- 10.05 Exhibit behavior supporting and promoting cultural and ethnic diversity.
- 10.06 Demonstrate interpersonal skills that enhance team productivity and foster positive work ethics.
- 10.07 Demonstrate appropriate dress and grooming for the workplace environment.

**WORK-BASED LEARNING**

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

- 20.48 Perform tasks as outlined in the job performance skills plan.
- 20.49 Display an acceptable level of productivity and quality control in an information technology position.
- 20.50 Maintain appropriate records.

**Florida Department of Education  
STUDENT PERFORMANCE STANDARDS**

**Course Number:** 8207360  
**Course Title:** AOIT Multimedia Design  
**Course Credit:** 1

**COURSE DESCRIPTION:**

This course focuses on digital media and advanced web tools. The content includes information technology career research; advanced HTML, DHTML, and XML commands and web page design; advanced web topics such as webscripting and web server administration; and basic multimedia applications including audio, video, graphics, text, and animation tools. After successful completion of AOIT PC Support and Networking, AOIT Internship, and AOIT Multimedia Design, students will have met Occupational Completion Point - Data Code C, Computer Support Specialist - OES Code 25104.

**WORKPLACE COMMUNICATIONS**

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

- 02.50 Use professional business vocabulary appropriate for multimedia information technology environments.
- 02.51 Organize ideas and communicate oral and written messages appropriate for multimedia information technology environments.
- 02.52 Collaborate with individuals and teams to complete tasks and solve multimedia information technology problems.
- 02.53 Apply the writing process to the creation of multimedia-related documents following designated business formats.

**JOB READINESS AND CAREER DEVELOPMENT**

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:

- 09.30 Research, compare, and contrast career opportunities in web and multimedia design.
- 09.31 Analyze personal skills and aptitudes in comparison with web and multimedia design career opportunities.
- 09.32 Refine and implement a plan to facilitate personal growth and skill development related to web and multimedia design career opportunities.
- 09.20 Update and maintain an electronic career portfolio.
- 09.33 Present an electronic career portfolio to an audience.
- 09.34 Update an electronic resume.
- 09.35 Conduct a comprehensive job search.
- 09.36 Develop a postsecondary education plan to prepare for an information technology career.

**WORK-BASED LEARNING**

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

- 20.51 Participate in work-based learning experiences in a multimedia information technology environment.
- 20.52 Discuss the application of multimedia design principles in an information technology environment.
- 20.53 Discuss the use of multimedia design technology in an information technology environment.

**WEB DESIGN**

**MULTIMEDIA DESIGN**

PLEASE NOTE: Additional Intended Outcomes and Student Performance Standards to be identified by July 2003