# **INSTRUCTIONAL TECHNOLOGY**

#### Computer Curriculum K- 5

The technology foundation for students from kindergarten through fifth grade is organized by the Technology Literacy Competency Based Curriculum (CBC). These competencies provide a framework for linking performance indicators with computer literacy requirements. The objectives are administered by classroom teachers, media specialists, and in some cases technology resource teachers.

The objectives include basic computer operations and concepts; social, ethical, and human issues; the use of productivity, communication and research tools; and the use of problem-solving and decision-making tools. The basic operations and concepts competencies range from basic mouse/keyboard manipulation to working independently with appropriate hardware. Students learn to use technology tools to prepare publications and produce presentations. Telecommunications provides the opportunity to collaborate, publish and interact with peers, experts, and other audiences. Students use technology to locate, evaluate, and collect information from a variety of sources; the data is processed and a report is produced. Through the process students use the resources for problem solving and making informed decisions.

The Computer Literacy requirement for graduation is met by taking either a Computer Education course or a Business Technology Education course at either the middle or senior high school level or by demonstrating mastery of computer skills.

### Middle School Grade 6 – 8 Computer Education

Computer Education courses are electives in most middle schools. However, many middle schools offer an exploratory wheel that includes a semester course of Introduction to Computers.

These courses include basic computer operations and concepts; social, ethical, and human issues; an introduction to the use of productivity, communication and research tools; and an introduction to the use of problem-solving and decision-making tools.

- · M/J Introduction to Computers
- M/J Computer Applications
- M/J Emergent Technologies

These courses enable students to learn programming in a modern computer language. Content includes basic computer operations and concepts; social, ethical, and human issues; design and modification of algorithms; and the development of computer programs. The annual courses include:

- M/J Introduction to Programming
- M/J Intermediate Programming

There is one newly approved Computer Education course at middle school level. The course is correlated to the Sunshine State Standards, but the Competency Based Curriculum has not yet been defined. The course is:

0200060 M/J Exploring the Internet

#### **Business Technology Education**

These middle school courses teach business skills using technology:

- · Business Keyboarding
- Business Leadership Skills
- · Computer Applications in Business

# **Senior High School 9 - 12 Computer Education**

These courses include the basic computer operations and concepts; social, ethical, and human issues; the use of productivity, communication and research tools; and the use of problem-solving and decision-making tools. The semester courses include:

- · Introduction to Computers
- · Computer Applications I
- Computer Applications II

These courses enable students to learn programming in a modern computer language. Content includes basic computer operations and concepts; social, ethical, and human issues; design and modification of algorithms; and the

development of computer programs. The annual courses include:

- · Computer Programming I
- · Computer Programming II
- · Computer Programming III
- · Computer Programming BASIC
- · Advanced Placement Computer Science

These courses enable students to develop the ability to explore and adapt new technological advances as tools for analysis. Content includes the use of modern information systems to process and analyze data, apply and evaluate appropriate information tools and demonstrate the understanding of those tools and their impact.

- · Applied Computer Technology
- · Visual Computer Modeling
- · Emergent Technologies
- · Computer Studies International Baccalaureate
- · Information technology in a Global Society
- · Computer Applications in Science and Engineering

There are four newly approved Computer Education courses at senior high school level. The courses are correlated to the Sunshine State Standards, but the Competency Based Curricula has not yet been defined. The courses are:

0200385 Interactive Design 0200390 Information Design 0200400 Web Masters

· 0200410 Design Portfolio

## **Business Technology Education**

These courses teach business skills using technology:

- Computer and Business Skills
- · Emerging Technology in Business
- · Networking
- · Web Design
- Digital Publishing
- · Business Computer Programming