

**Florida Department of Education
Curriculum Framework**

Course Title: Exploring Information Technology Careers
Course Type: Orientation/Exploratory
Career Cluster: Information Technology

Secondary – Middle School

| | |
|-----------------------|---|
| Course Number | 9009350 |
| CIP Number | 149009350M |
| Grade Level | 6-8 |
| Standard Length | Semester |
| Teacher Certification | Refer to the <u>Course Structure</u> section. |
| CTSO | FBLA BPA |
| CTE Program Resources | http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml |

Purpose

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in the Information Technology career cluster. The content includes but is not limited to terminology, careers, history, required skills, and technologies associated with pathways comprising the Information Technology career cluster. Reinforcement of academic skills occurs through classroom instruction and applied laboratory procedures.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|--|---|----------|
| 9009350 | Exploring Information Technology Careers | BUS ED 1 @2 COMPU SCI 6 INFO TECH 7 G WEB DEV 7 G DIGI MEDIA 7 G CYBER TECH 7 G COMP PROG 7 G | Semester |

Standards

After successfully completing this course, the student will be able to perform the following:

- 01.0 Demonstrate an understanding of the Network Systems career pathway.
- 02.0 Demonstrate an understanding of the Information Support and Services career pathway.
- 03.0 Demonstrate an understanding of the Web and Digital Communications career pathway.
- 04.0 Demonstrate an understanding of the Programming and Software Development career pathway.
- 05.0 Apply leadership and communication skills.
- 06.0 Describe how information technology is used in the Information Technology career cluster.
- 07.0 Use information technology tools.

**Florida Department of Education
Student Performance Standards**

Course Title: Exploring Information Technology Careers
Course Number: 9009350
Course Length: Semester

Course Description:

Beginning with a broad overview of the Information Technology career cluster, students are introduced to the terminology, careers, history, required skills, and technologies associated with each pathway in the Information Technology career cluster. Additionally, they will be provided with opportunities to acquire and demonstrate beginning leadership skills.

| CTE Standards and Benchmarks | |
|-------------------------------------|---|
| 01.0 | Demonstrate an understanding of the Network Systems career pathway. The student will be able to: |
| 01.01 | Define and use proper terminology associated with the Network Systems career pathway. |
| 01.02 | Describe some of the careers available in the Network Systems career pathway. |
| 01.03 | Identify common characteristics of the careers in the Network Systems career pathway. |
| 01.04 | Research the history of the Network Systems career pathway and describe how the associated careers have evolved and impacted society. |
| 01.05 | Identify skills required to successfully enter any career in the Network Systems career pathway. |
| 01.06 | Describe technologies associated in careers within the Network Systems career pathway. |
| 02.0 | Demonstrate an understanding of the Information Support and Services career pathway. The student will be able to: |
| 02.01 | Define and use proper terminology associated with the Information Support and Services career pathway. |
| 02.02 | Describe some of the careers available in the Information Support and Services career pathway. |
| 02.03 | Identify common characteristics of the careers in the Information Support and Services career pathway. |
| 02.04 | Research the history of the Information Support and Services career pathway and describe how the careers have evolved and impacted society. |
| 02.05 | Identify skills required to successfully enter any career in the Information Support and Services career pathway. |
| 02.06 | Describe technologies associated in careers within the Information Support and Services career pathway. |

| CTE Standards and Benchmarks | |
|------------------------------|---|
| 03.0 | Demonstrate an understanding of the Web and Digital Communications career pathway. The student will be able to: |
| 03.01 | Define and use proper terminology associated with the Web and Digital Communications career pathway. |
| 03.02 | Describe some of the careers available in the Web and Digital Communications career pathway. |
| 03.03 | Identify common characteristics of the careers in the Web and Digital Communications career pathway. |
| 03.04 | Research the history of the Web and Digital Communications career pathway and describe how the careers have evolved and impacted society. |
| 03.05 | Identify skills required to successfully enter any career in the Web and Digital Communications career pathway. |
| 03.06 | Describe technologies associated in careers within the Web and Digital Communications career pathway. |
| 04.0 | Demonstrate an understanding of the Programming and Software Development career pathway. The student will be able to: |
| 04.01 | Define and use proper terminology associated with the Programming and Software Development career pathway. |
| 04.02 | Describe some of the careers available in the Programming and Software Development career pathway. |
| 04.03 | Identify common characteristics of the careers in the Programming and Software Development career pathway. |
| 04.04 | Research the history of the Programming and Software Development career pathway and describe how the careers have evolved and impacted society. |
| 04.05 | Identify skills required to successfully enter any career in the Programming and Software Development career pathway. |
| 04.06 | Describe technologies associated in careers within the Programming and Software Development career pathway. |
| 05.0 | Apply leadership and communication skills. The student will be able to: |
| 05.01 | Discuss the establishment and history of the FBLA/BPA student organizations. |
| 05.02 | Identify the characteristics and responsibilities of organizational leaders. |
| 05.03 | Demonstrate parliamentary procedure skills during a meeting. |
| 05.04 | Participate on a committee which has an assigned task and report to the class. |
| 05.05 | Demonstrate effective communication skills through delivery of a speech, a slide presentation, or conducting a demonstration. |
| 05.06 | Use a computer to assist in the completion of a project related to the Information Technology career cluster. |
| 06.0 | Describe how information technology is used in the Information Technology career cluster. The student will be able to: |
| 06.01 | Identify information technology (IT) careers in the Information Technology career cluster, including the responsibilities, tasks and skills they require. |

| CTE Standards and Benchmarks | |
|------------------------------|---|
| 06.02 | Relate information technology project management concepts and terms to careers in the Information Technology career cluster. |
| 06.03 | Manage information technology components typically used in professions of the Information Technology career cluster. |
| 06.04 | Identify security-related ethical and legal IT issues faced by professionals in the Information Technology career cluster. |
| 07.0 | Use information technology tools. The student will be able to: |
| 07.01 | Identify the functions of web browsers, and use them to access the World Wide Web and other computer resources typically used in the Information Technology career cluster. |
| 07.02 | Use e-mail clients to send simple messages and files to other Internet users. |
| 07.03 | Demonstrate ways to communicate effectively using Internet technology. |
| 07.04 | Use different types of web search engines effectively to locate information relevant to the Information Technology career cluster. |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. To access an ELL supporting document which delineates performance definitions and descriptors, please click on the following link: <http://www.cpalms.org/uploads/docs/standards/eld/SI.pdf>.

For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition at sala@fldoe.org.

Career and Technical Student Organization (CTSO)

Florida Future Business Leaders of America (FBLA) and Florida Business Professionals of America (BPA) are the intercurricular career and technical student organizations providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. Accommodations change the way the student is instructed. 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.

In addition to accommodations, some secondary students with disabilities (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum and regulated secondary programs cannot be modified.

Additional Resources

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:

<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>.