CTE LAB In Information Technology Syllabus

Course Number: 10997G1002
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Course Description

CTE Lab in Information Technology is designed to enhance the student's general understanding and mastery of the cluster. This course is designed as a learning laboratory to support students' individual interests and goals. This laboratory may take place in a traditional classroom, in an industry setting, or in a virtual learning environment.

Prerequisites: None

Fees: There is a required fee of $5 per year since the student is required to pay $40 per year for the previous class.

Foundational Standards

1. Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.
2. Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.
3. Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.
4. Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.
5. Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.
6. Use technology to collaborate with peers and/or experts to create digital artifacts that can be published online for a target audience.
7. Formulate new ideas, solve problems, or create products through the design and engineering process by utilizing testing, prototypes, and user feedback.

Content Standards

1. Demonstrate expertise in a specific occupation within the Information Technology cluster.
    a. Meet benchmarks selected by the instructor from the appropriate curriculum frameworks, based upon the individual student's assessed needs. Research and Presentation
2. Conduct investigative research on a selected topic related to information technology using approved research methodology, interpret findings, and prepare a presentation to defend results.
    a. Select an investigative study based on research and prior knowledge.
    b. Collect, organize, and analyze data accurately and precisely
    c. Design procedures to test the research.
    d. Report, display, and defend the results of investigations to audiences that may include professionals and technical experts.
3. Demonstrate higher order critical thinking and reasoning skills appropriate for a career in information technology.
    a. Use mathematical and/or scientific skills to solve problems encountered in the chosen occupation.
    b. Locate, evaluate, and interpret information related to the chosen occupation in oral, print, and digital formats.
    c. Analyze and apply data and/or measurements to solve problems and interpret documents.
    d. Construct charts, tables, or graphs using functions and data. Leadership
4. Apply enhanced leadership and professional career skills needed in information technology careers
    a. Develop and present a professional presentation offering potential solutions to a current issue.
    b. Demonstrate leadership and career skills in job placement, job shadowing, entrepreneurship, or internship, or by obtaining an industry-recognized credential of value.
    c. Participate in leadership development opportunities available through the appropriate student organization and/or professional organizations in the information technology field.
    d. Demonstrate written and oral communication skills through presentations, public speaking, live or virtual interviews, and/or an employment portfolio.

Embedded Numeracy Anchor Assignment

This course contains mathematical problems for some units. Students will have to add the volume of hard drive space from ones, tens, hundreds, thousands, or millions. They will also have to know the speed of a computer and convert in Megahertz and Gigahertz.

Embedded Literacy Anchor Assignment

Students will read and comprehend complex informational texts used to explain hardware, software, processes, and basic computer components. Students will be shown an example of simulation labs and will be tasks to complete each task in order.

Classroom Expectations

1. Be respectful of the teacher, each other, and all classroom property
2. Participate in classroom discussion and group work
3. Use appropriate language at all times
4. Be in class on time and seated
5. Keep your chair at your laptop unless you have permission to move

Daily Class Work

Students will review previous class work and get more in depth to the information technology cluster.

Assessment Procedures: Final grades will be comprised of daily activities, quizzes, and tests

Minor (40%): Daily activities and quizzes
Major (60%): Units tests and Simulators Labs

Grading Policy

A (90-100), B (80-89), C (70-79), D (60-69), and F (below 60).

CTSO: SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. SkillsUSA improves the quality of our nation's future skilled workforce through the development of Framework skills that include personal, workplace and technical skills grounded in academics. Alabama SkillsUSA is committed to producing a generation of strong workers and exceptional leaders who will take America's workforce into a new frontier of triumph and prosperity.

** The syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions, or substitutions. For any necessary changes, adequate notice will be provided to the students.*