Java Programming

Java Programming is a one-credit course designed to provide students with a conceptual understanding of object-oriented programming. Students learn to use Java language object-oriented technologies to solve business problems. Topics also include language fundamentals and the Java language application programming interface (API). Students create classes, objects, and applications using Java language.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Software Development

Students will:

1. Utilize research results to distinguish between Java and other programming languages.

2. Analyze objects in Java code to develop effective programs.

3. Utilize mathematics skills to assist in evaluating system and software requirements to determine usability.

4. Demonstrate the effective use of Java tools for software development.

5. Explain basics of creating classes, including methods, arguments, and return values.

6. Construct objects to meet Java program requirements.

7. Demonstrate the Java software development process.

8. Design a software application using Java tools.

9. Implement a simple applet by writing the code, performing unit testing, and debugging the program.

10. Determine how to handle errors in package creation.

Customer Service

11. Demonstrate Java software testing.

12. Analyze quality assurance tasks to produce quality products.

13. Identify maintenance and customer support functions.

Career Opportunities

14. Determine career and entrepreneurial opportunities, responsibilities, and educational and credentialing requirements in the Java programming field.

Leadership

15. Apply skills in communication, leadership, and teamwork in the Java programming field.
    - Applying problem-solving and critical-thinking skills to resolve workplace conflict