Kentucky CTE

Computer Science: Object-Oriented Programming I

Design, develop, compile, debug, test, run and document programs. OOP1-1	1. **Design, develop, compile, debug, test, run and document programs.** OOP1-1
Demonstrate knowledge of the program development life cycle. OOP1-2	2. **Demonstrate knowledge of the program development life cycle.** OOP1-2
Design and develop programs using operators and assignments. OOP1-3	3. **Design and develop programs using operators and assignments.** OOP1-3
Design and develop programs using primitive data types. OOP1-4	4. **Design and develop programs using primitive data types.** OOP1-4
Design and develop programs using a variety of data types. OOP1-5	5. **Design and develop programs using a variety of data types.** OOP1-5
Design and develop programs using sequences, selection, and repetition structures OOP1-6	6. **Design and develop programs using sequences, selection, and repetition structures** OOP1-6
Design and develop programs using single and multi-dimensional arrays. OOP1-7	7. **Design and develop programs using single and multi-dimensional arrays.** OOP1-7
Design and develop programs using arrays,	8. **Design and develop programs using arrays, lists and tuples.** OOP1-8

lists and tuples. OOP1-8	
Utilize arrays OOP1-9	**9. Utilize arrays** OOP1-9
Design and develop programs using effective error and exception handling. OOP1-10	**10. Design and develop programs using effective error and exception handling.** OOP1-10
Design and develop programs using object-oriented programming features, including defining classes, instantiating objects, using arrays of objects OOP1-11	**11. Design and develop programs using object-oriented programming features, including defining classes, instantiating objects, using arrays of objects** OOP1-11
Design and develop programs implementing user-defined methods and modular programming. OOP1-12	**12. Design and develop programs implementing user-defined methods and modular programming.** OOP1-12
Explain how algorithms are used to produce artificial intelligences (AI). OOP1-13	**13. Explain how algorithms are used to produce artificial intelligences (AI).** OOP1-13
Design and develop programs using method overloading. OOP1-14	**14. Design and develop programs using method overloading.** OOP1-14
Design and develop programs using inheritance, encapsulation, and polymorphism. OOP1-15	**15. Design and develop programs using inheritance, encapsulation, and polymorphism.** OOP1-15
Design and develop programs using simple GUI components. OOP1-16	**16. Design and develop programs using simple GUI components.** OOP1-16
Evaluate and critique effectiveness and	**17. Evaluate and critique effectiveness and efficiency of code.** OOP1-17

efficiency of code. OOP1-17