

## AP Computer Science A (CSC335) Semester 1 Final Assessment Blueprint

Year Created: 2024-2025 Method of Delivery: Online

Subject: Career & Technical Education Administration Window: December Common Finals

| Item Types Included |                    |                                     |  |
|---------------------|--------------------|-------------------------------------|--|
| Туре                | Number of<br>Items | Description                         |  |
| MC                  | 26                 | Multiple Choice - Select one answer |  |

| Resources                             |  |  |
|---------------------------------------|--|--|
| Software & App Design Course Sequence |  |  |

| Standards At-A Glance          |                    |   |  |
|--------------------------------|--------------------|---|--|
| Standard                       | Number of<br>Items | Standard Description  |  |
| CTE [2018].ITEC.9-12.SAD.1.1   | 1                  | Establish objectives and outcomes for a task  |  |
| CTE [2018].ITEC.9-12.SAD.12.11 | 1                  | Demonstrate the use of return values from modules   |  |
| CTE [2018].ITEC.9-12.SAD.12.8  | 1                  | Name identifiers and formatting code by applying recognized conventions   |  |
| CTE [2018].ITEC.9-12.SAD.13.1  | 1                  | Identify errors in program modules  |  |
| CTE [2018].ITEC.9-12.SAD.13.4  | 1                  | Categorize, identify, and correct errors in code, including syntax, semantic, logic, and runtime                                      |  |
| CTE [2018].ITEC.9-12.SAD.18.4  | 1                  | Read the state of an object by invoking accessor methods  |  |
| CTE [2018].ITEC.9-12.SAD.18.5  | 1                  | Change the state of an object by invoking a modifier method   |  |
| CTE [2018].ITEC.9-12.SAD.18.7  | 2                  | Create a user-defined class   |  |
| CTE [2018].ITEC.9-12.SAD.4.0   | 1                  | Utilize Primitive Data Types and Strings in Writing Programs  |  |
| CTE [2018].ITEC.9-12.SAD.4.1   | 2                  | Declare numeric, Boolean, character, string variables, and float and double   |  |
| CTE [2018].ITEC.9-12.SAD.4.2   | 1                  | Choose the appropriate data type for a given situation  |  |
| CTE [2018].ITEC.9-12.SAD.4.3   | 1                  | Identify the correct syntax and usage for constants and variables in a program  |  |
| CTE [2018].ITEC.9-12.SAD.4.4   | 3                  | Identify the correct syntax and safe functions for operations on strings, including length, substring, and concatenation              |  |
| CTE [2018].ITEC.9-12.SAD.4.5   | 1                  | Explain complications of storing and manipulating data (i.e., the Big-O notation for analyzing storage and efficiency concerns, etc.) |  |
| CTE [2018].ITEC.9-12.SAD.5.0   | 1                  | Perform Basic Computer Mathematics in Information Technology  |  |
| CTE [2018].ITEC.9-12.SAD.5.3   | 3                  | Identify and correctly use arithmetic operations, applying the order of operations (precedence) with respect to programming           |  |
| CTE [2018].ITEC.9-12.SAD.5.4   | 1                  | Interpret and construct mathematical formulas   |  |
| CTE [2018].ITEC.9-12.SAD.5.5   | 1                  | Identify correct and problematic uses of integers, floating-point numbers, and fixed-point numbers in arithmetic                      |  |
| CTE [2018].ITEC.9-12.SAD.6.2   | 2                  | Compare values using relational operators (e.g., =, >, =, <=, not equal)  |  |
| CTE [2018].ITEC.9-12.SAD.6.3   | 1                  | Evaluate Boolean expressions (e.g., AND, OR, NOT, NOR, XOR)   |  |
| CTE [2018].ITEC.9-12.SAD.7.1   | 2                  | Identify various types of iteration structure (e.g., while, for, for-each, recursion)   |  |
| CTE [2018].ITEC.9-12.SAD.7.2   | 2                  | Identify how loops are controlled (variable conditions and exits)   |  |
| CTE [2018].ITEC.9-12.SAD.7.3   | 1                  | Use the correct syntax for nested loops   |  |
| CTE [2018].ITEC.9-12.SAD.7.4   | 1                  | Compute the values of variables involved with nested loops  |  |

<sup>\*</sup>Some items may be tagged to more than one standard.