

INTRO TO PROGRAMMING
College Credit and Careers Network
Dual Credit Articulation Agreement

Upon completion of high school courses equivalent to the following competencies:

- Use the Visual Studio Integrated Development Environment (IDE)
- Instantiate and use objects including Windows Forms and controls.
- Code event-driven procedures (event-handlers)
- Use variables with appropriate data-types and scope
- Use Selection structures
- Use Repetition structures
- Create Functions and Procedures
- Create and manipulate non-scalar data structures (arrays and collections)
- Apply accepted programming standards
- Use appropriately arithmetic, logical and comparison operators to develop complex expressions.
- Write a program that receives input from the user and prints a result on the screen.
- Understand the idea of a computer program variable
- Understand the difference between numeric and string variables. Write a program that assigns values to a variety of variables.
- Write a program that uses mathematical expressions built from
- Understand the differences between the For next, While, Do-Until. Choose the given situation. Write short programs of loops
- Write programs utilizing two different methods of branching: the simple If-then statement, and the more flexible Select statement. Write branches that use compound conditions built with AND and OR following kinds of loops: appropriate loop for a utilizing the various kinds
- Split a programming task into appropriate subroutines. Write a menu-driven program that matches each menu item with a subroutine.
- Write routines to initialize arrays, print arrays, and search arrays for elements satisfying a certain condition.
- Design algorithms that apply a recursion formula until a limit condition is met. Design algorithms to perform simple tasks with collections of numbers and strings. A collection could be a sequence of entries typed by the user or the elements in an array. Algorithms would perform tasks such as the following: Find the largest number of the collection, count the strings in the collection, and find all numbers in the collection that satisfies a condition.

A student earning a “B” or better may earn college credit at the following college:

<u>College</u>	<u>Course</u>	<u>Credits</u>
Bellevue College	PROG 110	5
Shoreline Community College	COMPU 131	5