

# CSCI 115 Algorithms and Data Structures:

## *Lab 01: C++, Creation of classes, Class Array with methods*

Create an “Array” class addressing following functionality

- Default Constructor for the class
  - Constructor with array size
  - Copy Constructor with size
- Destructor for the class
- Function to access the size
- Display the content of the array
- Function to Add an element at the beginning
- Function to Add an element at the end
- Function to Remove an element at the beginning
- Function to Remove an element at the end
- Function to Inverse the order of the elements in the array
- Function to Return the sum of the elements in the array
- Function to Return an array that contains the odd numbers only
- Function to Display the content of the array in a file through fstream
- Overload the + operator so you can concatenate 2 arrays of size n and m into a new array of size n+m