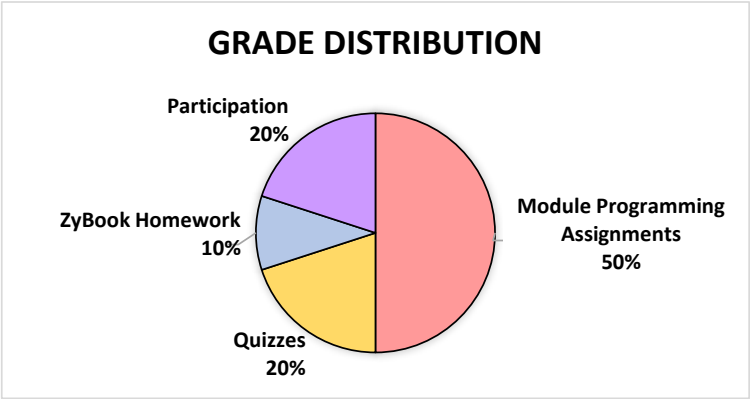

Module Topics, Assessments, Objectives, and Suggested Due Dates

All assessments must be completed by July 23, 2024 (no exceptions).
ZyBooks Homework has strict due dates but all other assessments have suggested due dates, which are listed in the table below.

Module	Suggested Due Date	Topic	Assessment	Point(s)	Module Objectives
Module 0	**27-May-24**	**Start Here**	(Not Applicable)	0	You will understand course outcomes and expectations of the course. You will understand how to contact the instructor for help. You will be able to set up your computer for the course.
Module 1	**3-Jun-24**	**Introduction** **Problem Solving / Algorithm Design**	Participation -Watch Videos: 10 points -Discussion Post/Reply: 5 points -Pre-Course Experience Survey: 5 points	20	You will understand the importance of programs and programming. You will compile & run your first C++ program. You will understand what procedural design is. You will be able to create a basic algorithm for a computer using computational thinking.
			ZyBook Homework 1 (due 6/3/24 and can't be late!)	10	
			Program 1 Assignment (debugging basic)	50	
			Quiz 1	20	

Module	Suggested Due Date	Topic	Assessment	Point(s)	Module Objectives
Module 2	**10-Jun-24**	**Programming Basics**	Participation -Watch Videos: 8 points -Practice Assignments *Module 2 Practice 1: 3 points *Module 2 Practice 2: 3 points *Module 2 Practice 3: 3 points *Module 2 Practice 4: 3 points	20	You will be able to write a basic C++ program with input and output. You will be able to store various types of information in memory. You will be able to perform various arithmetic calculations. You will be able to use C++ libraries to write programs. You will be able to do basic troubleshooting by learning about errors and warnings in C++. You will be able to format your output to increase user readability.
			ZyBook Homework 2 (due 6/10/24 and can't be late!)	10	
			Program 2 Assignment	50	
			Quiz 2	20	
Module 3	**17-Jun-24**	**Branching and Loops**	Participation -Watch Videos: 10 points -Practice Assignments *Module 3 Practice 1: 5 points *Module 3 Practice 2: 5 points	20	You will be able to create programs with branching. You will be able to determine when to use branching in a program and which branching construct is most appropriate for the situation. You will be able to create programs with loops. You will be able to determine when to use loops in a program and which loop is most appropriate for the situation. You will understand and practice incremental programming to aid in debugging and testing. You will implement user input validation in your programs. You will learn common algorithms used with loops.
			ZyBook Homework 3 (due 6/17/24 and can't be late!)	10	
			Program 3 Assignment	50	
			Quiz 3	20	
Module 4	**24-Jun-24**	**Files and Functions**	Participation -Watch Videos: 5 points -Practice Assignments *Module 4 Practice 1: 3 points *Module 4 Practice 2: 3 points *Module 4 Practice 3: 3 points *Module 4 Practice 4: 3 points *Module 4 Practice 5: 3 points	20	You will be able to use files for data storage including writing to and reading from text files. You will be able to debug errors in programs using files. You will be able to create user-defined functions. You will take advantage of functions to modularize and organize your code. You will understand and correctly choose passing data by value or passing data by reference to a function. You will be able to debug and test your code that contains user-defined functions. You will learn best coding practices when writing programs with functions and multiple source and header files.
			Program 4 Assignment	50	
			ZyBook Homework 4 (due 6/24/24 and can't be late!)	10	
			Quiz 4	20	

Module	Suggested Due Date	Topic	Assessment	Point(s)	Module Objectives
Module 5	**1-Jul-24**	**Arrays**	Participation -Watch Videos: 11 points -Practice Assignments *Module 5 Practice 1: 3 points *Module 5 Practice 2: 3 points *Module 5 Practice 3: 3 points	20	You will be able to create and correctly use the array data structure. You will be able to implement several basic algorithms associated with arrays. You will be able to solve a computing problem using arrays. You will learn several C++ libraries including cstring and vectors. You will be able to debug and test your code containing arrays.
			Program 5 Assignment	50	
			ZyBook Homework 5 (due 7/1/24 and can't be late!)	10	
			Quiz 5	20	
Module 6	**8-Jul-24**	**Pointers**	Participation -Watch Videos: 5 points -Practice Assignments *Module 6 Practice 1: 3 points *Module 6 Practice 2: 3 points *Module 6 Practice 3: 3 points *Module 6 Practice 4: 3 points *Module 6 Practice 5: 3 points	20	You will understand when pointers are required and when they should be used to create more efficient programs. You will be able to solve a computing problem using pointers. You will understand and be able to correctly dynamically allocate variables and arrays during runtime of their program. You will be able to debug and test your code containing pointers.
			Program 6 Assignment	50	
			ZyBook Homework 6 (due 7/8/24 and can't be late!)	10	
			Quiz 6	20	
Module 7	**15-Jul**	**Structures and Classes & Objects**	Participation -Watch Videos: 5 points -Practice Assignments *Module 6 Practice 1: 2 points *Module 6 Practice 2: 2 points *Module 6 Practice 3: 2 points *Module 6 Practice 4: 2 points *Module 6 Practice 5: 2 points -Discussion Post & Reply: 2 points -Post-Course Experience Survey: 3 points	20	You will understand when structures could be used. You will be able to solve a computing problem using structures. You will be able to debug and test your code containing structures. You will understand the concept of object-oriented programming and the difference between structures and objects. You will be able to solve a computing problem using an object. You will be able to debug and test your code containing objects.
			Program 7 Assignment	50	
			ZyBook Homework 7 (due 7/15/24 and can't be late!)	10	
			Quiz 7 over functions	20	