Southern New Hampshire University

CS-300 DSA: Analysis and Design

4-3 Milestone: Hash Table Data Structure Pseudocode

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**Pseudocodes**

**Defining the Program**

START

Open files with fstream

Creating a function with two parameters

Call to open file, WHILE file is not empty

Read data

Parse each line

Check for course title and number

IF file format is free from errors

IF prerequisites exist

ELSE BREAK

ELSE put “error” to OUTPUT

Close file

END

**Course Objects**

START

Initialize Course Vector vector<Node> nodes

Create HashTable ClassCreate

Insert method to insert items to HashTable

Open file

Check if file was successfully opened

Loop through each line in the input file

FOR each line in file

FOR first and second value

Use pushback to add value to vector

IF third value exists

Add to current value with pushback

Insert method for each value

Close file

END

**Data Structure**

START

RETRIEVE INPUT

Assign INPUT to key

IF key is found

Print out the course information

IF prerequisites exist

Print prerequisites course information

ELSE display course cannot be found to OUTPUT

END