**Pseudocode Week 4 Milestone**

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**CS-300 SNHU**

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DECLARE hash table STRUCT

CREATE array

IN array ADD linked lists

LET each linked list be a bucket

DECLARE Hash Function

CREATE hash function AS INPUT key EQUALS (course name)

WHICH is CREATED using modulo to GENERATE INDEX for each key value

NEXT

USE fstream to OPEN file with course list and related information

FOR each ROW WHERE the ROW is NOT NULL

CALCULATE index with CALL to Hash Function

THEN

CREATE new node FROM course information

INSERT new node INTO linked list that corresponds to the correct key index

THEN

CREATE SEARCH for specific course option IN a FUNCTION

GET user to input search of (course name)

IF course name entered EXISTS

OUTPUT line with course name and its corresponding information

CALL Hash Function to CALCULATE index at key EQUALS course name

TRAVERSE linked list AT index WHERE course name EQUALS SEARCH

FINALLY

IF course name, key, and index IS found IN search

PRINT line containing ALL course information

ELSE

PRINT NOT found message

RETURN with Good-Bye