**Pseudocode Hash Table**  
 (Opening the file, reading data, parsing lines and checking for errors)  
  
FUNCTION loadCoursesFromFile(filePath, hashTable)

OPEN file at filePath FOR reading

IF file cannot be opened THEN

PRINT "Error: Cannot open file."

RETURN

INITIALIZE an empty HashTable object if not provided

WHILE there are more lines in the file DO

READ a line from the file

SPLIT line into tokens using a delimiter (e.g., comma)

IF number of tokens < 2 THEN

PRINT "Error: Invalid format on line" + line

CONTINUE

EXTRACT courseNumber, title, and prerequisites from tokens

VALIDATE prerequisites

IF any prerequisite is not in hashTable THEN

PRINT "Error: Prerequisite course not found on line" + line

CONTINUE

CREATE a Course object with courseNumber, title, and prerequisites

CALL insertCourse(hashTable, Course)

CLOSE the file

**Creating Course Objects and Inserting Into Hash Table**  
FUNCTION insertCourse(hashTable, course)

COMPUTE key from course.courseNumber using a hash function

CREATE a new Node with the Course object

IF hashTable.nodes[key] is empty THEN

SET hashTable.nodes[key] to the new Node

ELSE

TRAVERSE the linked list at hashTable.nodes[key]

ADD new Node to the end of the list

**Printing Course information**FUNCTION printCourseInfo(hashTable, searchCourseNumber)

COMPUTE key from searchCourseNumber using a hash function

IF hashTable.nodes[key] is empty THEN

PRINT "Course not found."

RETURN

TRAVERSE the linked list at hashTable.nodes[key]

FOR each Node DO

IF Node.course.courseNumber == searchCourseNumber THEN

PRINT "Course Number: " + Node.course.courseNumber

PRINT "Title: " + Node.course.title

PRINT "Prerequisites: " + Node.course.prerequisites

RETURN

PRINT "Course not found."