

# CSIS 3103 Exam 2 Topic Overview

Section exercises, Quick-check exercises, and Review questions are good sources of review.

## Ch 2: Collections and Lists (2.7, 2.8, 2.10)

The `LinkedList` class  
Applications of list classes  
Using iterators  
The `Comparable` interface

## Ch 3: Stacks

Stack operations  
Alternative implementations – array, linked list  
Applications using stacks  
Postfix expressions and evaluation

## Ch 4: Queues

Queue operations  
Alternative implementations – circular array, linked list  
Deque  
Applications using queues

## Ch 5: Recursion

Recursive definitions – base cases & recursive cases  
Recursive methods – trace and write  
Recursion vs. stacks

<p>Know terms and be able to use them Be able to complete partially written Java code Be able to read and use method specifications Be able to write a method Be able to trace execution of a program Be able to evaluate the efficiency of algorithms for operations on the data structures</p>
--