



Final Exam Topics

In general, you are responsible for the material from Chapters 9 and 10 and the material on templates and iterators. Following is a breakdown of the major topic areas that may be tested.

Templates

- Function templates
- Class templates

Algorithm Efficiency and Analysis

- best case worst case expected case
- Big O Notation
- Rates of growth
- Analyzing running time of algorithms and code
- Search Algorithms: binary search, linear search
- Sorting algorithms: selection, insertion, and quicksort
- Analysis of sorting and searching

Trees

- General trees: properties, applications
- Binary trees: properties, ADT
- Binary tree traversals
- Binary tree implementation
- Binary search trees: algorithms for search, insertion, deletion

Iterators

- Types of iterators
- Their operations and properties
- Methods that create them
- Using them