**Additional Topics for ECE 2036 Final**

New material and topics from Chapters 17-22, threads, and the last lab has been covered since Test II. Chapters 20 and 22 were not covered in extreme detail. Much of the material in these two Chapters was covered in earlier examples and earlier courses.

**File I/O**

Reading and Writing Files

Sequential Access and Updates

Random Access

Binary Files

**C++ Strings**

Assignment and concatenation

Substrings

Comparing Strings

Finding Substrings

Conversion to C strings

**Linked list data structures**

Using pointers to setup a linked list

Insertion and deletion of a node

Doubly linked lists

Stack, Queues, and Trees

Using C++ templates to set up lists

**STL Library**

Basic containers

Common member functions for STL containers

Using Iterators with containers