CPSC 200—Computer Programming III, Fall/96

Instructor: David Casperson, Office: Lib 444, Phone: 960-6672

Syllabus: Most of the material will be from *Weiss*, in particular Chapters 2, 3, and 7, with other material as time permits. Topics include:

- Algorithm analysis and asymptotic complexity (3 weeks).
- Templates and a discussion of coding container classes in C++ (1 week).
- Sorting algorithms (2 weeks).
- List classes and iterator classes (2 weeks).
- List based classes: stacks, queues, and deques (1 week).
- Tree classes (3 weeks).

Times are approximate. The remainder of the semestre will be spent either exploring applications of the above data structures, or providing a brief introduction to data structures to be considered further in CPSC 281.

Lecture information: M W F 14:30–15:20. Room Library 5–155

Text Book: *Data Structures and Algorithm Analysis*, by Mark Allen Weiss.

References: *C++ How to Program*, by Deitel and Deitel.

The C++ Programming Language, by Bjarne Stroustrup.

For transfer students who are still uncomfortable with C++ or object-oriented programming I would also recommend the small but excellently written *On to C++* by Patrick Henry Winston. Students who took C++ in CPSC 101 at UNBC may find this book somewhat elementary.

Grading Scheme:

Homework:	20%
Midterm Tests:	40%
Final Exam:	40%

I reserve the right to change the weight of any portion of this marking scheme. If changes are made, your grade will be calculated using the original weighting and the new weighting, and you will be given the higher of the two.

Prerequisites: CPSC 101 or permission of instructor.