

Computer Science 200—Fall 1995

		Room	Phone	E-mail
<i>Instructor</i>	Dr. David Casperson	Library 444	960-6672	casper@unbc.edu
<i>Secretary</i>	Miss Roberta Bilous	Library 455	960-6490	bilous@unbc.edu
<i>Programme Chair</i>	Professor Lee Keener	Library 476	960-6639	keener@unbc.edu

Course Objectives:

- ◆ To understand the concepts of Object Oriented Programming (OOP) and Object Oriented Design (OOD), data abstraction and information hiding.
- ◆ To become familiar measuring computational complexity and performing algorithm analysis.
- ◆ To become familiar with some of the common abstract data types and data structures frequently used to store collections of objects, and with the corresponding algorithms.
- ◆ To become proficient at programming in C++.

Time/Location:

Lectures: MWF 14:30–15:20 Library 5-172
Office Hours: *to be determined.*

Textbook:

Mark Allen Weiss, *Data Structures and Algorithm Analysis in C++*, Benjamin Cummings, 1994. **Required.**

Patrick Henry Winston, *On to C++*, Addison-Wesley, 1994. This book isn't absolutely essential, but I would **strongly recommend** it. It contains many examples of C++ code, and is a good resource book for answering questions of the kind, "how do I ... in C++?"

References:

Bjarne Stroustrup, *The C++ Programming Language* (second edition), Addison-Wesley, 1993. **This book is not required for CPSC 200.** This is the C++ programming language book in the same way that Kernighan & Ritchie is the C programming language book. It contains good advice about object-oriented programming and object-oriented design as well as defining the C++ language. On the other hand it is fairly heavy going.

Material:

Will hand out a syllabus next week. The first week will be an introduction to C++. The second week will be an introduction to the analysis of algorithms, and then we'll move on to sorting algorithms (Chapter 7 of *Weiss*).

Course Assessment:

The grade that you receive for CPSC 200 is based on homework assignments, two midterm examinations, and a final examination. The relative weights for the various components is shown in the table below. Some of the homework assignments involve programming in C++.

Component	%	Dates
Assignments	20	Weekly
Midterm	20	Wednesday, 11-October-95
Midterm	20	Friday, 3-November-95
Final Exam	40	During Final Exam week, which begins Monday, 11 December

Notes:

Midterm dates are still tentative

I reserve the right to modify the weightings of the various components of the course.