



**School of Computer Science**

**CS 343**

**Concurrent and Parallel Programming**

**Course Notes\* Fall 2015**

<http://www.student.cs.uwaterloo.ca/~cs343>

[μC++ download](#) or [Github](#) (installation: `sudo sh u++-6.1.0.sh`)

September 7, 2015

### **Outline**

An introduction to concurrent programming, with an emphasis on language constructs. Major topics include: exceptions, coroutines, atomic operations, critical sections, mutual exclusion, semaphores, high-level concurrency, deadlock, interprocess communication, process structuring, shared memory and distributed architectures. Students learn how to structure, implement and debug complex control-flow.

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