

COSC441 Course Outline

Note: This lecture plan is subject to revision.

Shared Memory Concurrent Programming

-- Introduction and pitfalls [1]

-- POSIX threads (C, C++) [4]

- the aim here is to present general issues by means of POSIX threads

Specification and verification (CTL, NuSMV) [1]

Message Passing

-- Unix message queues, sockets, MPI [1]

-- Erlang [4]

- the aim here is to present the shared-nothing approach and bring out the relationship between concurrency and distribution by means of Erlang

Failure; the CAP theorem. [1]

Review [1]