

COMP 4009: Parallel Programming for Clusters and Multi-Core Processors

Course Outline

Introduction to parallel architectures, programming languages and algorithms for processor clusters and multi-core processors. Distributed memory architectures, cluster computing, message passing parallel programming, multi-core processors, shared memory parallel programming, use of thread libraries, parallel performance analysis. Prerequisites: COMP 2402, COMP 2404, COMP 3000.

Course Material

Lectures

Assignments

Programming & Library Resources

Textbook [OPTIONAL]: "Introduction to Parallel Computing" by Ananth Grama, George Karypis, Vipin Kumar, and Anshul Gupta. Addison Wesley, 2003, ISBN: 0-201-64865-2.

Teaching Assistant

Andrew Schoenrock (aschoenr@scs.carleton.ca)

TA Office Hours

TBA, Room 6210B, VSIM Building

Student Evaluation

Four Assignments (10% each), Midterm (15%), Final Exam (45%).

Late assignment marks reduction: up to 24 hrs: minus 10%, 24-48 hrs: minus 25%, 48-72 hrs: minus 50%, more than 72 hrs: minus 100%, solution discussed in class or posted: minus 100%.

When you receive marked assignments back from the TA, please raise any concerns about the marking within two weeks (i.e. please do not wait until end of term to complain about your Assignment 1 mark).

How To Succeed...

Ask questions. Do your homework. Don't fall behind. Read the lecture notes and/or textbook before class. Review the notes after class. Don't spin your wheels for too long. Ask! Be active, have fun!

Plagiarism Policy

All assignments must be completed on an individual basis. If you do decide to copy all (or part of) another student's assignment, be prepared to deal with the consequences. All parties involved will automatically receive "0" (even if you are the one who completed the work properly and then gave copies to someone else). All plagiarism occurrences will be reported to the Dean. Punishment may be as severe as being removed from the course or even from the University.