CMPT 431 - E100 Distributed Systems

Instructor(s): Alaa Alameldeen

Calendar Objective/Description:
Distributed Systems

Instructor's Objectives:
The course aims to provide an understanding of principles involved in designing modern parallel and distributed software systems. It focuses on the fundamentals of parallel algorithm design and parallel programming techniques by covering key concepts like concurrency, synchronization, consistency models, and fault tolerance.

Prerequisites:
see go.sfu.ca

Topics:
- Principles of Parallel Algorithm Design
- Shared Memory Programming
- Distributed Memory Model & Programming
- Consistency Models
- Fault Tolerance
- Scalable Analytics

Grading:
Quizzes 35%, Assignments 65%

Reference Books:
The Art of Multiprocessor Programming, Maurice Herlihy and Nir Shavit, Elsevier/Morgan Kaufmann, 2012, 9780123977953

Academic Honesty Statement:
Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).