Schedule of lectures in Parallel Computing

(Right to changes reserved)

March 24
Java Threads
The thread concept. Synchronization. Cooperation among threads.

March 31
Introduction to OpenMP (Textbook Chapter 1-3)
Shared-memory and parallel programming models. Overview of OpenMP.

April 7.
OpenMP Language Features (Textbook Chapter 4)
Work-sharing and synchronization constructs. Interaction with the execution environment. Advanced OpenMP constructs.

April 14.
How to Get Good Performance by Using OpenMP (Textbook Chapter 5)
Task Parallelism
Performance considerations for sequential programs. Measuring OpenMP performance. Best practices. Task parallelism.

April 21.
CUDA Programming (Guest lecture by Thomas Schrøder)
OpenMP Troubleshooting (Textbook Chapter 7)
Common misunderstandings and frequent errors. Debugging OpenMP code.

April 23.
Assignments hand-in