Week		Topic(s)
1	Lecture	Introduction and Overview
	Exercises	Getting started on the cluster
2	Lecture	Single Processor Machines and Memory Hierarchies
	Exercises	Running Sequential and Parallel Programs
3	Lecture	Parallel Architectures and Shared Memory Programming
	Exercises	OpenMP Tutorial
4	Lecture	Sources of Parallelism and Locality in Simulations
	Exercises	OpenMP Tutorial Part II
5	Lecture	Intro to Distributed Memory Programming and MPI
	Exercises	Introduction to MPI
6	Lecture	Performance Modeling and Advanced MPI
	Exercises	MPI Collective Communication
7	Lecture	Dense Linear Algebra
	Exercises	Dense Linear Algebra Libraries
8	Lecture	Sparse Linear Algebra
	Exercises	Sparse Matrix Storage Formats and SpMV
9	Lecture	Graph Partitioning
	Exercises	Graph Partitioning Examples in MATLAB
10	Lecture	Particle Methods
	Exercises	Optimizing Particle Codes
11	Lecture	The Fast Fourier Transform
	Exercises	Hybrid Parallel Programming
12	Lecture	High Performance Machine Learning
	Exercises	Course Review