

Class	Date	Topic(s)	Notes
1P	2.10.2020	Introduction and Overview	
1C		Getting started on the local cluster	
2P	9.10.2020	Sequential and Parallel Architectures	
2C		Running a parallel program	
3P	16.10.2020	Parallel Programming Models	
3C		OpenMP Tutorial	
4P	23.10.2020	Sources of Parallelism and Locality	
4C		MPI tutorial I	
5P	30.10.2020	Advanced MPI and Communication Collectives	
5C		MPI tutorial II	
6P	6.11.2020	Performance Modeling and Prediction	
6C		Benchmarking the cluster	
7P	13.11.2020	Dense Linear Algebra	
7C		ScaLAPACK tutorial	
8P	20.11.2020	Sparse Linear Algebra and Structured/Unstructured Grids	
8C		PETSc tutorial	
9P	27.11.2020	Graph Partitioning	
9C		Graph Partitioning	
10P	4.12.2020	Machine Learning	
10C		Neural network training using Spark	
11P	11.12.2020	Introduction to CUDA and GPUs	
11C		CUDA tutorial	
12P	18.12.2020	FFTs	
12C		TBD	
13P	8.1.2020	Applications - Climate modeling, cosmology, etc.	
13C		Review	